1394

```
Asp Arg Leu Met Leu Glu Leu Gly Phe Ser Lys Val Phe Arg Val Glu
        355                 360                 365

Asn Pro Phe Asp Phe Met Glu Asn Ile Ser Leu Glu Gly Lys Thr Asn
    370                 375                 380

Phe Phe Glu Lys Arg Val Gly Glu Tyr Gln Arg Met Gly Val Met Ser
385                 390                 395                 400

Ser Pro Thr Glu Asn Ser Phe Thr Leu Asp Ala Asp Phe
                405                 410
```

<210> 1348
<211> 243
<212> PRT
<213> Homo sapiens

<400> 1348
```
Thr Gly Asn Lys Met Gln Asp Pro Asn Ala Asp Thr Glu Trp Asn Asp
 1               5                 10                  15

Ile Leu Arg Lys Lys Gly Ile Leu Pro Pro Lys Glu Ser Leu Lys Glu
            20                  25                  30

Leu Glu Glu Glu Ala Glu Glu Glu Gln Arg Ile Leu Gln Gln Ser Val
            35                  40                  45

Val Lys Thr Tyr Glu Asp Met Thr Leu Glu Glu Leu Glu Asp His Glu
        50                  55                  60

Asp Glu Phe Asn Glu Glu Asp Glu Arg Ala Ile Glu Met Tyr Arg Arg
65                  70                  75                  80

Arg Arg Leu Ala Glu Trp Lys Ala Thr Lys Leu Lys Asn Lys Phe Gly
                85                  90                  95

Glu Val Leu Glu Ile Ser Gly Lys Asp Tyr Val Gln Glu Val Thr Lys
            100                 105                 110

Ala Gly Glu Gly Leu Trp Val Ile Leu His Leu Tyr Lys Gln Gly Ile
            115                 120                 125

Pro Leu Cys Ala Leu Ile Asn Gln His Leu Ser Gly Leu Ala Arg Lys
        130                 135                 140

Phe Pro Asp Val Lys Phe Ile Lys Ala Ile Ser Thr Thr Cys Ile Pro
145                 150                 155                 160

Asn Tyr Pro Asp Arg Asn Leu Pro Thr Ile Phe Val Tyr Leu Glu Gly
```

```
                        165                    170                    175
Asp Ile Lys Ala Gln Phe Ile Gly Pro Leu Val Phe Gly Gly Met Asn
            180                 185                 190

Leu Thr Arg Asp Glu Leu Glu Trp Lys Leu Ser Glu Ser Gly Ala Ile
            195                 200                 205

Met Thr Asp Leu Glu Glu Asn Pro Lys Lys Pro Ile Glu Asp Val Leu
    210                 215                 220

Leu Ser Ser Val Arg Arg Ser Val Leu Met Lys Arg Asp Ser Asp Ser
225                 230                 235                 240

Glu Gly Asp
```

<210> 1349
<211> 326
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1349

```
Arg Met Ala Thr Pro Leu Pro Pro Ser Pro Arg His Leu Arg Leu
  1           5               10                  15

Leu Arg Leu Leu Leu Ser Gly Leu Val Leu Gly Ala Ala Leu Arg Gly
            20                  25                  30

Ala Ala Ala Gly His Pro Asp Val Ala Ala Cys Pro Gly Ser Leu Asp
            35                  40                  45

Cys Ala Leu Lys Arg Arg Ala Arg Cys Pro Pro Gly Ala His Ala Cys
      50                  55                  60

Gly Pro Cys Leu Gln Pro Phe Gln Glu Asp Gln Gln Gly Leu Cys Val
65                  70                  75                  80

Pro Arg Met Arg Arg Pro Pro Gly Gly Gly Arg Pro Gln Pro Arg Leu
```

1396

			85					90					95		

Glu Asp Glu Ile Asp Phe Leu Ala Gln Glu Leu Ala Arg Lys Glu Ser
             100   105   110

Gly His Ser Thr Pro Pro Leu Pro Lys Asp Arg Gln Arg Leu Pro Glu
             115   120   125

Pro Ala Thr Leu Gly Phe Ser Ala Xaa Gly Gln Gly Leu Xaa Leu Gly
         130   135   140

Leu Pro Ser Thr Pro Gly Thr Pro Thr Pro Thr Pro His Thr Ser Leu
145   150   155   160

Gly Ser Pro Val Ser Ser Asp Pro Val His Met Ser Pro Leu Glu Pro
             165   170   175

Arg Gly Gly Gln Gly Asp Gly Leu Ala Leu Val Leu Ile Leu Ala Phe
         180   185   190

Cys Val Ala Gly Ala Ala Ala Leu Ser Val Ala Ser Leu Cys Trp Cys
         195   200   205

Arg Leu Gln Arg Glu Ile Arg Leu Thr Gln Lys Ala Asp Tyr Ala Thr
     210   215   220

Ala Lys Ala Pro Gly Ser Pro Ala Ala Pro Arg Ile Ser Pro Gly Asp
225   230   235   240

Gln Arg Leu Ala Gln Ser Ala Glu Met Tyr His Tyr Gln His Gln Arg
             245   250   255

Gln Gln Met Leu Cys Leu Glu Arg His Lys Glu Pro Pro Lys Glu Leu
         260   265   270

Asp Thr Ala Ser Ser Asp Glu Glu Asn Glu Asp Gly Asp Phe Thr Val
         275   280   285

Tyr Glu Cys Pro Gly Leu Ala Pro Thr Gly Glu Met Glu Val Arg Asn
     290   295   300

Pro Leu Phe Asp His Ala Ala Leu Ser Ala Pro Leu Pro Ala Pro Ser
305   310   315   320

Ser Pro Pro Ala Leu Pro
             325

<210> 1350
<211> 62

```
<212> PRT
<213> Homo sapiens

<400> 1350
Val Lys Ser Asp Thr Pro Pro Cys Val Ser Lys Asn Leu Val Pro Pro
1               5                   10                  15


Leu His Thr Ser Leu Thr Leu Asn Ile Phe His Trp Ile Leu Asp Arg
                20              25                  30


Ala Lys Gly Arg Thr Gly Ala Ser Gly Gly Pro Trp Leu Phe Lys Ser
            35              40                  45


Trp Ile Ile Cys Asp Ser Asn His Lys Phe Leu Ala Asn Phe
    50              55                  60




<210> 1351
<211> 312
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (299)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1351
Glu Pro Arg Pro Gly Cys Gly Asn Lys Met Ala Gly Lys Lys Asn Val
1               5                   10                  15


Leu Ser Ser Leu Ala Val Tyr Ala Glu Asp Ser Glu Pro Glu Ser Asp
                20              25                  30


Gly Glu Ala Gly Ile Glu Ala Val Gly Ser Ala Ala Glu Glu Lys Gly
            35              40                  45


Gly Leu Val Ser Asp Ala Tyr Gly Glu Asp Asp Phe Ser Arg Leu Gly
        50              55                  60


Gly Asp Glu Asp Gly Tyr Glu Glu Glu Glu Asp Glu Asn Ser Arg Gln
65              70                  75                  80


Ser Glu Asp Asp Asp Ser Glu Thr Glu Lys Pro Glu Ala Asp Asp Pro
                85                  90                  95


Lys Asp Asn Thr Glu Ala Glu Lys Arg Asp Pro Gln Glu Leu Val Ala
                100             105                 110


Ser Phe Ser Glu Arg Val Arg Asn Met Ser Pro Asp Glu Ile Lys Ile
```

```
              115                  120                   125

     Pro Pro Glu Pro Pro Gly Arg Cys Ser Asn His Leu Gln Asp Lys Ile
         130               135               140

     Gln Lys Leu Tyr Glu Arg Lys Ile Lys Glu Gly Met Asp Met Asn Tyr
     145               150               155               160

     Ile Ile Gln Arg Lys Lys Glu Phe Arg Asn Pro Ser Ile Tyr Glu Lys
                   165               170               175

     Leu Ile Gln Phe Cys Ala Ile Asp Glu Leu Gly Thr Asn Tyr Pro Lys
                   180               185               190

     Asp Met Phe Asp Pro His Gly Trp Ser Glu Asp Ser Tyr Tyr Glu Ala
                   195               200               205

     Leu Ala Lys Ala Gln Lys Ile Glu Met Asp Lys Leu Glu Lys Ala Lys
         210               215               220

     Lys Glu Arg Thr Lys Ile Glu Phe Val Thr Gly Thr Lys Lys Gly Thr
     225               230               235               240

     Thr Thr Asn Ala Thr Ser Thr Thr Thr Thr Thr Ala Ser Thr Ala Val
                   245               250               255

     Ala Asp Ala Gln Lys Arg Lys Ser Lys Trp Asp Ser Ala Ile Pro Val
                   260               265               270

     Thr Thr Ile Ser Pro Ala His His Pro His His His Ser His Pro Ala
                   275               280               285

     Ser Cys Cys His Gly His His Gln Arg Gln Xaa Ser Lys Asp His Arg
         290               295               300

     His Leu Cys Cys Gly Ala Pro Leu
     305               310
```

<210> 1352
<211> 259
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1352

1399

```
Leu Leu Asp Ser Leu Lys Xaa Asp Tyr Ala Gly Lys Pro Gln Pro Pro
 1               5               10              15

Ile Lys Ser Glu Arg Arg Asn Pro Pro Ser Tyr Ala Met Ala Gly Lys
             20              25              30

Lys Val Leu Ile Val Tyr Ala His Gln Glu Pro Lys Ser Phe Asn Gly
         35              40              45

Ser Leu Lys Asn Val Ala Val Asp Glu Leu Ser Arg Gln Gly Cys Thr
     50              55              60

Val Thr Val Ser Asp Leu Tyr Ala Met Asn Phe Glu Pro Arg Ala Thr
 65              70              75              80

Asp Lys Asp Ile Thr Gly Thr Leu Ser Asn Pro Glu Val Phe Asn Tyr
             85              90              95

Gly Val Glu Thr His Glu Ala Tyr Lys Gln Arg Ser Leu Ala Ser Asp
             100             105             110

Ile Thr Asp Glu Gln Lys Lys Val Arg Glu Ala Asp Leu Val Ile Phe
         115             120             125

Gln Phe Pro Leu Tyr Trp Phe Ser Val Pro Ala Ile Leu Lys Gly Trp
     130             135             140

Met Asp Arg Val Leu Cys Gln Gly Phe Ala Phe Asp Ile Pro Gly Phe
145             150             155             160

Tyr Asp Ser Gly Leu Leu Gln Gly Lys Leu Ala Leu Leu Ser Val Thr
             165             170             175

Thr Gly Gly Thr Ala Glu Met Tyr Thr Lys Thr Gly Val Asn Gly Asp
             180             185             190

Ser Arg Tyr Phe Leu Trp Pro Leu Gln His Gly Thr Leu His Phe Cys
         195             200             205

Gly Phe Lys Val Leu Ala Pro Gln Ile Ser Phe Ala Pro Glu Ile Ala
     210             215             220

Ser Glu Glu Glu Arg Lys Gly Met Val Ala Ala Trp Ser Gln Arg Leu
225             230             235             240

Gln Thr Ile Trp Lys Glu Glu Pro Ile Pro Cys Thr Ala His Trp His
             245             250             255

Phe Gly Gln
```

```
<210> 1353
<211> 72
<212> PRT
<213> Homo sapiens

<400> 1353
Asp Leu Ala Ser Glu Glu His Phe Phe Ser Val Lys Phe Leu Tyr Leu
 1               5                  10                  15

Lys Ile Gln Lys Tyr Phe Arg Ile Leu Leu Ile Leu Ser Pro Val Phe
               20                  25                  30

Thr Ser Phe Trp Lys Thr Cys Ile Thr Met Ser Leu Glu Lys Gly Gln
               35                  40                  45

Arg Lys Ala Phe His Val Lys Ile Arg Ser Leu Ala Ile Ser Asn Pro
           50                  55                  60

Val Leu Phe Ser Leu His Phe Phe
65                  70


<210> 1354
<211> 301
<212> PRT
<213> Homo sapiens

<400> 1354
Lys Arg Arg Arg Arg Leu Glu Gln Arg Gln Gln Pro Asp Glu Gln Arg
 1               5                  10                  15

Arg Arg Ser Gly Ala Met Val Lys Met Ala Ala Ala Gly Gly Gly Gly
               20                  25                  30

Gly Gly Gly Arg Tyr Tyr Gly Gly Gly Ser Glu Gly Gly Arg Ala Pro
               35                  40                  45

Lys Arg Leu Lys Thr Asp Asn Ala Gly Asp Gln His Gly Gly Gly Gly
           50                  55                  60

Gly Gly Gly Gly Gly Ala Gly Ala Ala Gly Gly Gly Gly Gly Gly Glu
65                  70                  75                  80

Asn Tyr Asp Asp Pro His Lys Thr Pro Ala Ser Pro Val Val His Ile
               85                  90                  95

Arg Gly Leu Ile Asp Gly Val Val Glu Ala Asp Leu Val Glu Ala Leu
               100                 105                 110
```

```
Gln Glu Phe Gly Pro Ile Ser Tyr Val Val Val Met Pro Lys Lys Arg
        115             120             125

Gln Ala Leu Val Glu Phe Glu Asp Val Leu Gly Ala Cys Asn Ala Val
        130             135             140

Asn Tyr Ala Ala Asp Asn Gln Ile Tyr Ile Ala Gly His Pro Ala Phe
145             150             155             160

Val Asn Tyr Ser Thr Ser Gln Lys Ile Ser Arg Pro Gly Asp Ser Asp
            165             170             175

Asp Ser Arg Ser Val Asn Ser Val Leu Leu Phe Thr Ile Leu Asn Pro
            180             185             190

Ile Tyr Ser Ile Thr Thr Asp Val Leu Tyr Thr Ile Cys Asn Pro Cys
            195             200             205

Gly Pro Val Gln Arg Ile Val Ile Phe Arg Lys Asn Gly Val Gln Ala
    210             215             220

Met Val Glu Phe Asp Ser Val Gln Ser Ala Gln Arg Ala Lys Ala Ser
225             230             235             240

Leu Asn Gly Ala Asp Ile Tyr Ser Gly Cys Cys Thr Leu Lys Ile Glu
            245             250             255

Tyr Ala Lys Pro Thr Arg Leu Asn Val Phe Lys Asn Asp Gln Asp Thr
        260             265             270

Trp Asp Tyr Thr Asn Pro Asn Leu Ser Gly Gln Gly Asn Leu Asp Asp
        275             280             285

His Phe Val Leu Asn Ile Pro Ala Leu Leu Ser Leu Asp
    290             295             300
```

```
<210> 1355
<211> 466
<212> PRT
<213> Homo sapiens

<400> 1355
Asn Thr Val Met Gly Arg Lys Lys Lys Gln Leu Lys Pro Trp Cys
 1           5               10              15

Trp Tyr Cys Asn Arg Asp Phe Asp Asp Glu Lys Ile Leu Ile Gln His
            20              25              30
```

```
Gln  Lys  Ala  Lys  His  Phe  Lys  Cys  His  Ile  Cys  His  Lys  Lys  Leu  Tyr
          35                  40                  45

Thr  Gly  Pro  Gly  Leu  Ala  Ile  His  Cys  Met  Gln  Val  His  Lys  Glu  Thr
          50                  55                  60

Ile  Asp  Ala  Val  Pro  Asn  Ala  Ile  Pro  Gly  Arg  Thr  Asp  Ile  Glu  Leu
65                       70                  75                       80

Glu  Ile  Tyr  Gly  Met  Glu  Gly  Ile  Pro  Glu  Lys  Asp  Met  Asp  Glu  Arg
               85                  90                  95

Arg  Arg  Leu  Leu  Glu  Gln  Lys  Thr  Gln  Glu  Ser  Gln  Lys  Lys  Lys  Gln
          100                 105                 110

Gln  Asp  Asp  Ser  Asp  Glu  Tyr  Asp  Asp  Asp  Ser  Ala  Ala  Ser  Thr
          115                 120                 125

Ser  Phe  Gln  Pro  Gln  Pro  Val  Gln  Pro  Gln  Gln  Gly  Tyr  Ile  Pro  Pro
     130                 135                 140

Met  Ala  Gln  Pro  Gly  Leu  Pro  Pro  Val  Pro  Gly  Ala  Pro  Gly  Met  Pro
145                 150                 155                 160

Pro  Gly  Ile  Pro  Pro  Leu  Met  Pro  Gly  Val  Pro  Pro  Leu  Met  Pro  Gly
               165                 170                 175

Met  Pro  Pro  Val  Met  Pro  Gly  Met  Pro  Pro  Gly  Leu  His  His  Gln  Arg
               180                 185                 190

Lys  Tyr  Thr  Gln  Ser  Phe  Cys  Gly  Glu  Asn  Ile  Met  Met  Pro  Met  Gly
          195                 200                 205

Gly  Met  Met  Pro  Pro  Gly  Pro  Gly  Ile  Pro  Pro  Leu  Met  Pro  Gly  Met
     210                 215                 220

Pro  Pro  Gly  Met  Pro  Pro  Pro  Val  Pro  Arg  Pro  Gly  Ile  Pro  Pro  Met
225                 230                 235                 240

Thr  Gln  Ala  Gln  Ala  Val  Ser  Ala  Pro  Gly  Ile  Leu  Asn  Arg  Pro  Pro
               245                 250                 255

Ala  Pro  Thr  Ala  Thr  Val  Pro  Ala  Pro  Gln  Pro  Pro  Val  Thr  Lys  Pro
               260                 265                 270

Leu  Phe  Pro  Ser  Ala  Gly  Gln  Ala  Gln  Ala  Ala  Val  Gln  Gly  Pro  Val
          275                 280                 285

Gly  Thr  Asp  Phe  Lys  Pro  Leu  Asn  Ser  Thr  Pro  Ala  Thr  Thr  Thr  Glu
     290                 295                 300
```

```
Pro Pro Lys Pro Thr Phe Pro Ala Tyr Thr Gln Ser Thr Ala Ser Thr
305             310             315             320

Thr Ser Thr Thr Asn Ser Thr Ala Ala Lys Pro Ala Ala Ser Ile Thr
            325             330             335

Ser Lys Pro Ala Thr Leu Thr Thr Thr Ser Ala Thr Ser Lys Leu Ile
        340             345             350

His Pro Asp Glu Asp Ile Ser Leu Glu Glu Arg Arg Ala Gln Leu Pro
        355             360             365

Lys Tyr Gln Arg Asn Leu Pro Arg Pro Gly Gln Ala Pro Ile Gly Asn
    370             375             380

Pro Pro Val Gly Pro Ile Gly Gly Met Met Pro Pro Gln Pro Gly Ile
385             390             395             400

Pro Gln Gln Gln Gly Met Arg Pro Pro Met Pro Pro His Gly Gln Tyr
            405             410             415

Gly Gly His His Gln Gly Met Pro Gly Tyr Leu Pro Gly Ala Met Pro
            420             425             430

Pro Tyr Gly Gln Gly Pro Pro Met Val Pro Pro Tyr Gln Gly Gly Pro
        435             440             445

Pro Arg Pro Pro Met Gly Met Arg Pro Pro Val Met Ser Gln Gly Gly
    450             455             460

Arg Tyr
465
```

```
<210> 1356
<211> 85
<212> PRT
<213> Homo sapiens

<400> 1356
Leu Ser Asp Asp Gln Ser Leu Leu Ile Ile Leu Leu Leu Lys Gly Leu
  1             5               10              15

Leu Thr Asn Leu Ser Phe Thr Pro Cys Gly Pro Cys Tyr Trp Tyr Thr
            20              25              30

Gln Tyr Val Leu Thr Glu Asp Met Asp Phe Ile Cys Ser Ser Ala Gly
            35              40              45

Ile Gly Lys L u Asp Leu Phe Ser Met Ile Gln Asn Ser Pro Ile Arg
```

```
              50                    55                    60

Arg Leu Glu Lys Glu Glu Leu Tyr Ser Ser Leu Cys Tyr Phe Leu Leu
 65                  70                  75                  80

Pro Phe Leu Phe Leu
                85
```

<210> 1357
<211> 580
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (526)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1357

```
Asp Ser Xaa Thr Phe Asp Asp Leu Ala Val Asp Phe Thr Pro Glu Glu
 1               5                  10                  15

Trp Thr Leu Leu Asp Pro Thr Gln Arg Asn Leu Tyr Arg Asp Val Met
             20                  25                  30

Leu Glu Asn Tyr Lys Asn Leu Ala Thr Val Gly Tyr Gln Leu Phe Lys
         35                  40                  45

Pro Ser Leu Ile Ser Trp Leu Glu Gln Glu Glu Ser Arg Thr Val Gln
     50                  55                  60

Arg Gly Asp Phe Gln Ala Ser Glu Trp Lys Val Gln Leu Lys Thr Lys
 65                  70                  75                  80

Glu Leu Ala Leu Gln Gln Asp Val Leu Gly Glu Pro Thr Ser Ser Gly
                 85                  90                  95

Ile Gln Met Ile Gly Ser His Asn Gly Gly Glu Val Ser Asp Val Lys
             100                 105                 110

Gln Cys Gly Asp Val Ser Ser Glu His Ser Cys Leu Lys Thr His Val
         115                 120                 125

Arg Thr Gln Asn Ser Glu Asn Thr Phe Glu Cys Tyr Leu Tyr Gly Val
```

```
          130                 135                 140

Asp Phe Leu Thr Leu His Lys Lys Thr Ser Thr Gly Glu Gln Arg Ser
145                 150                 155                 160

Val Phe Ser Gln Cys Gly Lys Ala Phe Ser Leu Asn Pro Asp Val Val
                165                 170                 175

Cys Gln Arg Thr Cys Thr Gly Glu Lys Ala Phe Asp Cys Ser Asp Ser
                180                 185                 190

Gly Lys Ser Phe Ile Asn His Ser His Leu Gln Gly His Leu Arg Thr
            195                 200                 205

His Asn Gly Glu Ser Leu His Glu Trp Lys Glu Cys Gly Arg Gly Phe
        210                 215                 220

Ile His Ser Thr Asp Leu Ala Val Arg Ile Gln Thr His Arg Ser Glu
225                 230                 235                 240

Lys Pro Tyr Lys Cys Lys Glu Cys Gly Lys Gly Phe Arg Tyr Ser Ala
                245                 250                 255

Tyr Leu Asn Ile His Met Gly Thr His Thr Gly Asp Asn Pro Tyr Glu
            260                 265                 270

Cys Lys Glu Cys Gly Lys Ala Phe Thr Arg Ser Cys Gln Leu Thr Gln
        275                 280                 285

His Arg Lys Thr His Thr Gly Glu Lys Pro Tyr Lys Cys Lys Asp Cys
    290                 295                 300

Gly Arg Ala Phe Thr Val Ser Ser Cys Leu Ser Gln His Met Lys Ile
305                 310                 315                 320

His Val Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Ile Ala Phe
                325                 330                 335

Thr Arg Ser Ser Gln Leu Thr Glu His Leu Lys Thr His Thr Ala Lys
            340                 345                 350

Asp Pro Phe Glu Cys Lys Ile Cys Gly Lys Ser Phe Arg Asn Ser Ser
        355                 360                 365

Cys Leu Ser Asp His Phe Arg Ile His Thr Gly Ile Lys Pro Tyr Lys
    370                 375                 380

Cys Lys Asp Cys Gly Lys Ala Phe Thr Gln Asn Ser Asp Leu Thr Lys
385                 390                 395                 400

His Ala Arg Thr His Ser Gly Glu Arg Pro Tyr Glu Cys Lys Glu Cys
```

```
                        405                     410                     415

      Gly Lys Ala Phe Ala Arg Ser Ser Arg Leu Ser Glu His Thr Arg Thr
                  420                     425                     430

      His Thr Gly Glu Lys Pro Phe Glu Cys Val Lys Cys Gly Lys Ala Phe
                  435                     440                     445

      Ala Ile Ser Ser Asn Leu Ser Gly His Leu Arg Ile His Thr Gly Glu
          450                     455                     460

      Lys Pro Phe Glu Cys Leu Glu Cys Gly Lys Ala Phe Thr His Ser Ser
      465                     470                     475                     480

      Ser Leu Asn Asn His Met Arg Thr His Ser Ala Lys Lys Pro Phe Thr
                  485                     490                     495

      Cys Met Glu Cys Gly Lys Ala Phe Lys Phe Pro Thr Cys Val Asn Leu
                  500                     505                     510

      His Met Arg Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Xaa Gln Cys
                  515                     520                     525

      Gly Lys Ser Phe Ser Tyr Ser Asn Ser Phe Gln Leu His Glu Arg Thr
          530                     535                     540

      His Thr Gly Glu Lys Pro Tyr Glu Cys Lys Glu Cys Gly Lys Ala Phe
      545                     550                     555                     560

      Ser Ser Ser Ser Ser Phe Arg Asn His Glu Arg Arg His Ala Asp Glu
                  565                     570                     575

      Arg Leu Ser Ala
                  580
```

<210> 1358
<211> 612
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (445)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<400> 1358
Glu Val Pro Glu Ala His Arg Ala Ser Pro Arg Glu Gly Thr Ser Gly
 1               5                  10                  15


Gly Glu Arg Leu Gln Asp Leu Val Lys Ser Lys Met Ser Glu Thr Ser
                20                  25                  30


Arg Thr Ala Phe Gly Gly Arg Arg Ala Val Pro Pro Asn Asn Ser Asn
            35                  40                  45


Ala Ala Glu Asp Asp Leu Pro Thr Val Glu Leu Gln Gly Val Val Pro
        50                  55                  60


Arg Gly Val Asn Leu Gln Asp Asp Ala Val Tyr Leu Asp Asn Glu Lys
65                  70                  75                  80


Glu Arg Glu Glu Tyr Val Leu Asn Asp Ile Gly Val Ile Phe Tyr Gly
                85                  90                  95


Glu Val Asn Asp Ile Lys Thr Arg Ser Trp Ser Tyr Gly Gln Phe Glu
                100             105                 110


Asp Gly Ile Leu Asp Thr Cys Leu Tyr Val Met Asp Arg Ala Gln Met
            115                 120                 125


Asp Leu Ser Gly Arg Xaa Asn Pro Ile Lys Val Ser Arg Val Gly Ser
        130                 135                 140


Ala Met Val Asn Ala Lys Asp Asp Glu Gly Val Leu Val Gly Ser Trp
145                 150                 155                 160


Asp Asn Ile Tyr Ala Tyr Gly Val Pro Pro Ser Ala Trp Thr Gly Ser
                165                 170                 175


Val Asp Ile Leu Leu Glu Tyr Arg Ser Ser Glu Asn Pro Val Arg Tyr
            180                 185                 190


Gly Gln Cys Trp Val Phe Ala Gly Val Phe Asn Thr Phe Leu Arg Cys
        195                 200                 205


Leu Gly Ile Pro Ala Arg Ile Val Thr Asn Tyr Phe Ser Ala His Asp
    210                 215                 220


Asn Asp Ala Asn Leu Gln Met Asp Ile Phe Leu Glu Glu Asp Gly Asn
225                 230                 235                 240


Val Asn Ser Lys Leu Thr Lys Asp Ser Val Trp Asn Tyr His Cys Trp
                245                 250                 255


Asn Glu Ala Trp Met Thr Arg Pro Asp Leu Pro Val Gly Phe Gly Gly
```

1408

```
                    260                    265                    270

        Trp Gln Ala Val Asp Ser Thr Pro Gln Glu Asn Ser Asp Gly Met Tyr
                275                    280                    285

        Arg Cys Gly Pro Ala Ser Val Gln Ala Ile Lys His Gly His Val Cys
                290                    295                    300

        Phe Gln Phe Asp Ala Pro Phe Val Phe Ala Glu Val Asn Ser Asp Leu
        305                    310                    315                    320

        Ile Tyr Ile Thr Ala Lys Lys Asp Gly Thr His Val Val Glu Asn Val
                        325                    330                    335

        Asp Ala Thr His Ile Gly Lys Leu Ile Val Thr Lys Gln Ile Gly Gly
                        340                    345                    350

        Asp Gly Met Met Asp Ile Thr Asp Thr Tyr Lys Phe Gln Glu Gly Gln
                355                    360                    365

        Glu Glu Glu Arg Leu Ala Leu Glu Thr Ala Leu Met Tyr Gly Ala Lys
                370                    375                    380

        Lys Pro Leu Asn Thr Glu Gly Val Met Lys Ser Arg Ser Asn Val Asp
        385                    390                    395                    400

        Met Asp Phe Glu Val Glu Asn Ala Val Leu Gly Lys Asp Phe Lys Leu
                        405                    410                    415

        Ser Ile Thr Phe Arg Asn Asn Ser His Asn Arg Tyr Thr Ile Thr Ala
                        420                    425                    430

        Tyr Leu Ser Ala Asn Ile Thr Phe Tyr Thr Gly Val Xaa Lys Ala Glu
                435                    440                    445

        Phe Lys Lys Glu Thr Phe Asp Val Thr Leu Glu Pro Leu Ser Phe Lys
                450                    455                    460

        Lys Glu Ala Val Leu Ile Gln Ala Gly Glu Tyr Met Gly Gln Leu Leu
        465                    470                    475                    480

        Glu Gln Ala Ser Leu His Phe Phe Val Thr Ala Arg Ile Asn Glu Thr
                        485                    490                    495

        Arg Asp Val Leu Ala Lys Gln Lys Ser Thr Val Leu Thr Ile Pro Glu
                        500                    505                    510

        Ile Ile Ile Lys Val Arg Gly Thr Gln Val Val Gly Ser Asp Met Thr
                515                    520                    525

        Val Thr Val Glu Phe Thr Asn Pro Leu Lys Glu Thr Leu Arg Asn Val
```

```
         530                   535                   540

Trp Val His Leu Asp Gly Pro Gly Val Thr Arg Pro Met Lys Lys Met
545               550               555               560

Phe Arg Glu Ile Arg Pro Asn Ser Thr Val Gln Trp Glu Glu Val Cys
                565               570               575

Arg Pro Trp Val Ser Gly His Arg Lys Leu Ile Ala Ser Met Ser Ser
            580               585               590

Asp Ser Leu Arg His Val Tyr Gly Glu Leu Asp Val Gln Ile Gln Arg
        595               600               605

Arg Pro Ser Met
    610
```

<210> 1359
<211> 56
<212> PRT
<213> Homo sapiens

<400> 1359
```
Leu Ser Cys Ile Val Leu Leu Arg Gln Ser Ser Val Lys Leu Tyr Gln
 1               5               10               15

Leu Arg Leu Val Ser Ser Asp Phe His Trp Gly Ile Arg Val Leu Ala
            20               25               30

Gly Leu Asn Leu Leu Leu Val Gly Ser Val Phe Leu Met Asn Lys Ser
        35               40               45

His Ser Thr Glu Leu Gln Val Ile
    50               55
```

<210> 1360
<211> 415
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (368)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

```
<222> (374)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (379)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (381)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (384)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (385)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (386)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (389)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (397)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (404)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (405)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (409)
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1360
```
Gly Gly Gly Gly Glu Lys Met Ala Asp Asp Pro Ser Ala Ala Asp Arg
 1               5                  10              15

Asn Val Glu Ile Trp Lys Ile Lys Lys Leu Ile Lys Ser Leu Glu Ala
            20              25              30

Ala Arg Gly Asn Gly Thr Ser Met Ile Ser Leu Ile Ile Pro Pro Lys
        35              40              45

Asp Gln Ile Ser Arg Val Ala Lys Met Leu Ala Asp Glu Phe Gly Thr
    50              55              60

Ala Ser Asn Ile Lys Ser Arg Val Asn Arg Leu Ser Val Leu Gly Ala
65              70              75              80

Ile Thr Ser Val Gln Gln Arg Leu Lys Leu Tyr Asn Lys Val Pro Pro
            85              90              95

Asn Gly Leu Val Val Tyr Cys Gly Thr Ile Val Thr Glu Glu Gly Lys
        100             105             110

Glu Lys Lys Val Asn Ile Asp Phe Glu Pro Phe Lys Pro Ile Asn Thr
    115             120             125

Ser Leu Tyr Leu Cys Asp Asn Lys Phe His Thr Glu Ala Leu Thr Ala
    130             135             140

Leu Leu Ser Asp Asp Ser Lys Phe Gly Phe Ile Val Ile Asp Gly Ser
145             150             155             160

Gly Ala Leu Phe Gly Thr Leu Gln Gly Asn Thr Arg Glu Val Leu His
            165             170             175

Lys Phe Thr Val Asp Leu Pro Lys Lys His Gly Arg Gly Gly Gln Ser
            180             185             190

Ala Leu Arg Phe Ala Arg Leu Arg Met Glu Lys Arg His Asn Tyr Val
        195             200             205

Arg Lys Val Ala Glu Thr Ala Val Gln Leu Phe Ile Ser Gly Asp Lys
    210             215             220

Val Asn Val Ala Gly Leu Val Leu Ala Gly Ser Ala Asp Phe Lys Thr
225             230             235             240

Glu Leu Ser Gln Ser Asp Met Phe Asp Gln Arg Leu Gln Ser Lys Val
            245             250             255
```

Leu Lys Leu Val Asp Ile Ser Tyr Gly Gly Glu Asn Gly Phe Asn Gln
            260   265   270

Ala Ile Glu Leu Ser Thr Glu Val Leu Ser Asn Val Lys Phe Ile Gln
            275   280   285

Glu Lys Lys Leu Ile Gly Arg Tyr Phe Asp Glu Ile Ser Gln Asp Thr
    290   295   300

Gly Lys Tyr Cys Phe Gly Val Glu Asp Thr Leu Lys Ala Leu Glu Met
305   310   315   320

Gly Ala Val Glu Ile Leu Ile Val Tyr Glu Asn Leu Asp Ile Met Arg
                325   330   335

Tyr Val Leu His Cys Gln Gly Thr Glu Glu Glu Lys Ile Leu Tyr Leu
            340   345   350

Thr Pro Glu Gln Glu Lys Asp Lys Ser His Phe Thr Asp Lys Glu Xaa
            355   360   365

Arg Thr Gly Thr Met Xaa Leu Ser Arg Ala Xaa Pro Xaa Leu Glu Xaa
    370   375   380

Xaa Xaa Asn Asn Xaa Lys Lys Leu Gly Leu Pro Trp Xaa Ile Gly Pro
385   390   395   400

Ile Asn Ser Xaa Xaa Arg Gly Gln Xaa Trp Lys Arg Ile Gly Gly
                405   410   415

<210> 1361
<211> 119
<212> PRT
<213> Homo sapiens

<400> 1361
His Ala Ser Ala Asp Ala Trp Ala Asp Ala Trp Val Ala Gly Ser Asp
 1   5   10   15

Phe Ile Lys Thr Ser Thr Gly Lys Glu Thr Val Asn Ala Thr Phe Pro
            20   25   30

Val Ala Ile Val Met Leu Arg Ala Ile Arg Asp Phe Phe Trp Lys Thr
            35   40   45

Gly Asn Lys Ile Gly Phe Lys Pro Ala Gly Gly Ile Arg Ser Ala Lys
    50   55   60

Asp Ser Leu Ala Trp Leu Ser Leu Val Lys Glu Glu Leu Gly Asp Glu

1413

```
        65                          70                          75                          80

     Trp Leu Lys Pro Glu Leu Phe Arg Ile Gly Ala Ser Thr Leu Leu Ser
                     85                          90                          95

     Asp Ile Glu Arg Gln Ile Tyr His His Val Thr Gly Arg Tyr Ala Ala
                     100                         105                         110

     Tyr His Asp Leu Pro Met Ser
                 115
```

<210> 1362
<211> 282
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1362
```
     Gly Arg Val Gly Gly Arg Val Gly Gly Arg Val Gly Phe Thr Ala Lys
      1               5                       10                      15

     Val Trp Asp Ala Val Ser Gly Asp Glu Leu Met Thr Leu Ala His Lys
                     20                      25                      30

     His Xaa Xaa Lys Thr Val Asp Phe Thr Gln Asp Ser Asn Tyr Leu Leu
                 35                      40                      45

     Thr Gly Gly Gln Asp Lys Leu Leu Arg Ile Tyr Asp Leu Asn Lys Pro
         50                      55                      60

     Glu Ala Glu Pro Lys Glu Ile Ser Gly His Thr Ser Gly Ile Lys Lys
      65                      70                      75                      80

     Ala Leu Trp Cys Ser Glu Asp Lys Gln Ile Leu Ser Ala Asp Asp Lys
                     85                      90                      95

     Thr Val Arg Leu Trp Asp His Ala Thr Met Thr Glu Val Lys Ser Leu
                     100                     105                     110

     Asn Phe Asn Met Ser Val Ser Ser Met Glu Tyr Il  Pro Glu Gly Glu
```

1414

```
                115                     120                     125

    Ile Leu Val Ile Thr Tyr Gly Arg Ser Ile Ala Phe His Ser Ala Val
        130                 135                 140

    Ser Leu Asp Pro Ile Lys Ser Phe Glu Ala Pro Ala Thr Ile Asn Ser
    145                 150                 155                 160

    Ala Ser Leu His Pro Glu Lys Glu Phe Leu Val Ala Gly Gly Glu Asp
                    165                 170                 175

    Phe Lys Leu Tyr Lys Tyr Asp Tyr Asn Ser Gly Glu Glu Leu Glu Ser
                180                 185                 190

    Tyr Lys Gly His Phe Gly Pro Ile His Cys Val Arg Phe Ser Pro Asp
                195                 200                 205

    Gly Glu Leu Tyr Ala Ser Gly Ser Glu Asp Gly Thr Leu Arg Leu Trp
        210                 215                 220

    Gln Thr Val Val Gly Lys Thr Tyr Gly Leu Trp Lys Cys Val Leu Pro
    225                 230                 235                 240

    Glu Glu Asp Ser Gly Glu Leu Ala Lys Pro Lys Ile Gly Phe Pro Glu
                    245                 250                 255

    Thr Thr Glu Glu Glu Leu Glu Glu Ile Ala Ser Glu Asn Ser Asp Cys
                260                 265                 270

    Ile Phe Pro Ser Ala Pro Asp Val Lys Ala
            275                 280
```

```
<210> 1363
<211> 334
<212> PRT
<213> Homo sapiens

<400> 1363
Thr Pro Arg Thr Pro Glu Pro His Lys Pro Gly Leu Ala Met Lys Pro
1               5                   10                  15

Gly Phe Ser Pro Arg Gly Gly Gly Phe Gly Gly Arg Gly Gly Phe Gly
            20                  25                  30

Asp Arg Gly Gly Arg Gly Gly Arg Gly Gly Phe Gly Gly Gly Arg Gly
            35                  40                  45

Arg Gly Gly Gly Phe Arg Gly Arg Gly Arg Gly Gly Gly Gly Gly Gly
    50                  55                  60
```

1415

Gly Gly Gly Gly Gly Gly Gly Arg Gly Gly Gly Gly Phe His Ser Gly
65   70   75   80

Gly Asn Arg Gly Arg Gly Arg Gly Gly Lys Arg Gly Asn Gln Ser Gly
            85   90   95

Lys Asn Val Met Val Glu Pro His Arg His Glu Gly Val Phe Ile Cys
            100   105   110

Arg Gly Lys Glu Asp Ala Leu Val Thr Lys Asn Leu Val Pro Gly Glu
        115   120   125

Ser Val Tyr Gly Glu Lys Arg Val Ser Ile Ser Glu Gly Asp Asp Lys
    130   135   140

Ile Glu Tyr Arg Ala Trp Asn Pro Phe Arg Ser Lys Leu Ala Ala Ala
145   150   155   160

Ile Leu Gly Gly Val Asp Gln Ile His Ile Lys Pro Gly Ala Lys Val
            165   170   175

Leu Tyr Leu Gly Ala Ala Ser Gly Thr Thr Val Ser His Val Ser Asp
        180   185   190

Ile Val Gly Pro Asp Gly Leu Val Tyr Ala Val Glu Phe Ser His Arg
        195   200   205

Ser Gly Arg Asp Leu Ile Asn Leu Ala Lys Lys Arg Thr Asn Ile Ile
    210   215   220

Pro Val Ile Glu Asp Ala Arg His Pro His Lys Tyr Arg Met Leu Ile
225   230   235   240

Ala Met Val Asp Val Ile Phe Ala Asp Val Ala Gln Pro Asp Gln Thr
            245   250   255

Arg Ile Val Ala Leu Asn Ala His Thr Phe Leu Arg Asn Gly Gly His
            260   265   270

Phe Val Ile Ser Ile Lys Ala Asn Cys Ile Asp Ser Thr Ala Ser Ala
        275   280   285

Glu Ala Val Phe Ala Ser Glu Val Lys Lys Met Gln Gln Glu Asn Met
        290   295   300

Lys Pro Gln Glu Gln Leu Thr Leu Glu Pro Tyr Glu Arg Asp His Ala
305   310   315   320

Val Val Val Gly Val Tyr Arg Pro Pro Pro Lys Val Lys Asn
            325   330

1416

<210> 1364
<211> 602
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (356)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1364
Pro Gly Ala Glu Lys Ser Gly Arg Ala Ala Glu Arg Pro Gly Arg Gly
 1   5   10   15

Pro Gly Arg Gly Ala His Ser Arg Pro Thr Ala Pro Arg Glu Arg Ala
            20   25   30

Pro Arg Ser Pro Ala Pro Ser Pro Pro Gly Met Gly Arg Ala Ala Ala
        35   40   45

Ala Glu Ala Pro Ala Trp Pro Gly Arg Thr Arg Pro Glu Ala Glu Gly
    50   55   60

Arg Ala Arg Ala Gln Leu Pro Gly His Gln Ile Gly Ala Arg Arg Ala
65   70   75   80

Gly Gly Pro Arg Ala Gly Leu Glu Met Ser Trp Pro Arg Arg Leu Leu
            85   90   95

Leu Arg Tyr Leu Phe Pro Ala Leu Leu Leu His Gly Leu Gly Glu Gly
        100   105   110

Ser Ala Leu Leu His Pro Asp Ser Arg Ser His Pro Arg Ser Leu Glu
        115   120   125

Lys Ser Ala Trp Arg Ala Phe Lys Glu Ser Gln Cys His His Met Leu
    130   135   140

Lys His Leu His Asn Gly Ala Arg Ile Thr Val Gln Met Pro Pro Thr
145   150   155   160

Ile Glu Gly His Trp Val Ser Thr Gly Cys Glu Val Arg Ser Gly Pro
            165   170   175

Glu Phe Ile Thr Arg Ser Tyr Arg Phe Tyr His Asn Asn Thr Phe Lys
        180   185   190

Ala Tyr Gln Phe Tyr Tyr Gly Ser Asn Arg Cys Thr Asn Pro Thr Tyr

1417

```
                195                    200                    205

    Thr Leu Ile Ile Arg Gly Lys Ile Arg Leu Arg Gln Ala Ser Trp Ile
        210                215                220

    Ile Arg Gly Gly Thr Glu Ala Asp Tyr Gln Leu His Asn Val Gln Val
    225                230                235                240

    Ile Cys His Thr Glu Ala Val Ala Glu Lys Leu Gly Gln Gln Val Asn
                    245                250                255

    Arg Thr Cys Pro Gly Phe Leu Ala Asp Gly Gly Pro Trp Val Gln Asp
                260                265                270

    Val Ala Tyr Asp Leu Trp Arg Glu Glu Asn Gly Cys Glu Cys Thr Lys
                275                280                285

    Ala Val Asn Phe Ala Met His Glu Leu Gln Leu Ile Arg Val Glu Lys
        290                295                300

    Gln Tyr Leu His His Asn Leu Asp His Leu Val Glu Glu Leu Phe Leu
    305                310                315                320

    Gly Asp Ile His Thr Asp Ala Thr Gln Arg Met Phe Tyr Arg Pro Ser
                325                330                335

    Ser Tyr Gln Pro Pro Leu Gln Asn Ala Lys Asn His Asp His Ala Cys
                340                345                350

    Ile Ala Cys Xaa Ile Ile Tyr Arg Ser Asp Glu His His Pro Pro Ile
                355                360                365

    Leu Pro Pro Lys Ala Asp Leu Thr Ile Gly Leu His Gly Glu Trp Val
        370                375                380

    Ser Gln Arg Cys Glu Val Arg Pro Glu Val Leu Phe Leu Thr Arg His
    385                390                395                400

    Phe Ile Phe His Asp Asn Asn Asn Thr Trp Glu Gly His Tyr Tyr His
                405                410                415

    Tyr Ser Asp Pro Val Cys Lys His Pro Thr Phe Ser Ile Tyr Ala Arg
                420                425                430

    Gly Arg Tyr Ser Arg Gly Val Leu Ser Ser Arg Val Met Gly Gly Thr
                435                440                445

    Glu Phe Val Phe Lys Val Asn His Met Lys Val Thr Pro Met Asp Ala
        450                455                460

    Ala Thr Ala Ser Leu Leu Asn Val Phe Asn Gly Asn Glu Cys Gly Ala
```

1418

```
    465                    470                    475                    480
    Glu Gly Ser Trp Gln Val Gly Ile Gln Gln Asp Val Thr His Thr Asn
                    485                    490                    495

    Gly Cys Val Ala Leu Gly Ile Lys Leu Pro His Thr Glu Tyr Glu Ile
                    500                    505                    510

    Phe Lys Met Glu Gln Asp Ala Arg Gly Arg Tyr Leu Leu Phe Asn Gly
                515                    520                    525

    Gln Arg Pro Ser Asp Gly Ser Ser Pro Asp Arg Pro Glu Lys Arg Ala
        530                    535                    540

    Thr Ser Tyr Gln Met Pro Leu Val Gln Cys Ala Ser Ser Ser Pro Arg
    545                    550                    555                    560

    Ala Glu Asp Leu Ala Glu Asp Ser Gly Ser Ser Leu Tyr Gly Arg Ala
                    565                    570                    575

    Pro Gly Arg His Thr Trp Ser Leu Leu Leu Ala Ala Leu Ala Cys Leu
                580                    585                    590

    Val Pro Leu Leu His Trp Asn Ile Arg Arg
            595                    600
```

<210> 1365
<211> 158
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (98)

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (141)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1365
Ser Asn Ser Gly Tyr Pro Phe Trp Thr Pro Ser Met Leu Trp Lys Leu
 1           5               10              15

Cys Thr Phe Thr Leu Leu Asn Lys Ala Xaa Ser Phe Phe Ser Leu Ser
            20              25              30

Val His Val Ser Phe Thr His Xaa Gly Gln Leu Pro His His Phe Phe
            35              40              45

Gly Val Ala Trp Gln Glu Pro Gln Val Leu His Leu Gly Glu Pro Asp
        50              55              60

Arg Arg Leu Gln Lys Arg Ile Lys Ala Ile Lys Leu Gln Xaa Ile Leu
65              70              75                      80

Gln Met Glu Pro Gln Met Ser Ser Ala His Gly Phe Tyr Arg Gly Pro
                85              90                      95

Leu Xaa Gln Pro Ala Gly Pro Ser Ile Thr Leu Glu Asn Ser Pro Leu
            100             105             110

Glu Asp Thr Lys Leu Gln Gly Pro Phe Phe Thr Pro Asn Gln Gln Glu
            115             120             125

Val Ala Arg Thr Asp Cys His Xaa Val Pro Asn Ser Xaa Xaa Gly Cys
        130             135             140

Pro Val Leu Glu Ala Gly Phe Arg Gly Gly Ala Gln Leu Gly
145             150             155

<210> 1366
```

```
<211> 466
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (205)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (220)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (347)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1366
Ser Thr Arg Xaa Arg Glu Gly Asn Ser His Ser Xaa Gly His Lys Thr
 1               5                  10                  15

Ile Gln Gly Ser Leu Gly Arg Leu Ser Ser Ala Val Pro Gly Ser Gly
             20                  25                  30

Ala Glu Leu Ser Pro Val Pro Asn Thr Asp Gly Thr Met Asn Ser Gly
             35                  40                  45

His Ser Phe Ser Gln Thr Pro Ser Ala Ser Phe His Gly Ala Gly Gly
         50                  55                  60

Gly Trp Gly Arg Pro Arg Ser Phe Pro Arg Ala Pro Thr Val His Gly
 65                  70                  75                  80

Gly Ala Gly Gly Ala Arg Ile Ser Leu Ser Phe Thr Thr Arg Ser Cys
                 85                  90                  95

Pro Pro Pro Gly Gly Ser Trp Gly Ser Gly Arg Ser Ser Pro Leu Leu
             100                 105                 110
```

Gly Gly Asn Gly Lys Ala Thr Met Gln Asn Leu Asn Asp Arg Leu Ala
        115   120   125

Ser Tyr Leu Glu Lys Val Arg Ala Leu Glu Glu Ala Asn Met Lys Leu
    130   135   140

Glu Ser Arg Ile Leu Lys Trp His Gln Gln Arg Asp Pro Gly Ser Lys
145   150   155   160

Lys Asp Tyr Ser Gln Tyr Glu Glu Asn Ile Thr His Leu Gln Glu Gln
            165   170   175

Ile Val Asp Gly Lys Met Thr Asn Ala Gln Ile Ile Leu Leu Ile Asp
            180   185   190

Asn Ala Arg Met Ala Val Asp Asp Phe Asn Leu Lys Xaa Glu Asn Glu
        195   200   205

His Ser Phe Lys Lys Asp Leu Glu Ile Glu Val Xaa Gly Leu Arg Arg
    210   215   220

Thr Leu Asp Asn Leu Thr Ile Val Thr Thr Asp Leu Glu Gln Glu Val
225   230   235   240

Glu Gly Met Arg Lys Glu Leu Ile Leu Met Lys Lys His His Glu Gln
            245   250   255

Glu Met Glu Lys His His Val Pro Ser Asp Phe Asn Val Asn Val Lys
            260   265   270

Val Asp Thr Gly Pro Arg Glu Asp Leu Ile Lys Val Leu Glu Asp Met
        275   280   285

Arg Gln Glu Tyr Glu Leu Ile Ile Lys Lys Lys His Arg Asp Leu Asp
    290   295   300

Thr Trp Tyr Lys Glu Gln Ser Ala Ala Met Ser Gln Glu Ala Ala Ser
305   310   315   320

Pro Ala Thr Val Gln Ser Arg Gln Gly Asp Ile His Glu Leu Lys Arg
            325   330   335

Thr Phe Gln Ala Leu Glu Ile Asp Leu Gln Xaa Gln Tyr Ser Thr Lys
        340   345   350

Ser Ala Leu Glu Asn Met Leu Ser Glu Thr Gln Ser Arg Tyr Ser Cys
        355   360   365

Lys Leu Gln Asp Met Gln Glu Ile Ile Ser His Tyr Glu Glu Glu Leu
    370   375   380

```
Thr Gln Leu Arg His Glu Leu Glu Arg Gln Asn Asn Glu Tyr Gln Val
385             390             395             400

Leu Leu Gly Ile Lys Thr His Leu Glu Lys Glu Ile Thr Thr Tyr Arg
            405             410             415

Arg Leu Leu Glu Gly Glu Ser Glu Gly Thr Arg Glu Glu Ser Lys Ser
            420             425             430

Ser Met Lys Val Ser Ala Thr Pro Lys Ile Lys Ala Ile Thr Gln Glu
        435             440             445

Thr Ile Asn Gly Arg Leu Val Leu Cys Gln Val Asn Glu Ile Gln Lys
    450             455             460

His Ala
465
```

```
<210> 1367
<211> 153
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (138)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (141)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

<221> SITE
<222> (152)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1367
Leu Arg Phe Ala Ser Pro Gly Pro Gly Ala Gly Arg Ala Arg Asp Ser
 1   5   10   15

Gln Arg Lys Trp Arg Arg Leu Arg Ala Arg Pro Leu Leu Gly Pro Gly
            20   25   30

Gln Gly Trp Ser Trp Ala Gly Ile Pro Ser Ser Ala Ala Ala Gln Arg
            35   40   45

Ala Gly Pro Pro Ala Gly Ala Leu Glu Ala Leu Ser Pro Gly Gly Ala
        50   55   60

Arg Ala His Ala Glu Arg Arg Gly Glu Met Arg Ala Thr Pro Leu Ala
65   70   75   80

Ala Pro Ala Gly Ser Leu Ser Arg Lys Lys Arg Leu Glu Leu Asp Asp
            85   90   95

Asn Leu Asp Thr Glu Arg Pro Val Gln Lys Arg Ala Arg Ser Gly Pro
            100   105   110

Gln Pro Arg Leu Pro Pro Cys Leu Leu Pro Leu Ser Pro Pro Thr Ala
            115   120   125

Pro Asp Arg Ala Thr Ala Val Xaa Thr Xaa Ser Arg Xaa Xaa Xaa Tyr
    130   135   140

Val Leu Leu Glu Ala Arg Arg Xaa Ala
145   150

<210> 1368
<211> 399
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

1424

```
<400> 1368
Ser Asp Asn Xaa Thr Asn Gly Cys Gly Leu Glu Ser Xaa Gly Asn Thr
 1               5                  10                  15

Val Thr Pro Val Asn Val Asn Glu Val Lys Pro Ile Asn Lys Gly Glu
             20                  25                  30

Glu Gln Ile Gly Phe Glu Leu Val Glu Lys Leu Phe Gln Gly Gln Leu
             35                  40                  45

Val Leu Arg Thr Arg Cys Leu Glu Cys Glu Ser Leu Thr Glu Arg Arg
         50                  55                  60

Glu Asp Phe Gln Asp Ile Ser Val Pro Val Gln Glu Asp Glu Leu Ser
 65                  70                  75                  80

Lys Val Glu Glu Ser Ser Glu Ile Ser Pro Glu Pro Lys Thr Glu Met
                 85                  90                  95

Lys Thr Leu Arg Trp Ala Ile Ser Gln Phe Ala Ser Val Glu Arg Ile
             100                 105                 110

Val Gly Glu Asp Lys Tyr Phe Cys Glu Asn Cys His His Tyr Thr Glu
             115                 120                 125

Ala Glu Arg Ser Leu Leu Phe Asp Lys Met Pro Glu Val Ile Thr Ile
         130                 135                 140

His Leu Lys Cys Phe Ala Ala Ser Gly Leu Glu Phe Asp Cys Tyr Gly
145                 150                 155                 160

Gly Gly Leu Ser Lys Ile Asn Thr Pro Leu Leu Thr Pro Leu Lys Leu
             165                 170                 175

Ser Leu Glu Glu Trp Ser Thr Lys Pro Thr Asn Asp Ser Tyr Gly Leu
             180                 185                 190

Phe Ala Val Val Met His Ser Gly Ile Thr Ile Ser Ser Gly His Tyr
             195                 200                 205

Thr Ala Ser Val Lys Val Thr Asp Leu Asn Ser Leu Glu Leu Asp Lys
         210                 215                 220

Gly Asn Phe Val Val Asp Gln Met Cys Glu Ile Gly Lys Pro Glu Pro
225                 230                 235                 240

Leu Asn Glu Glu Glu Ala Arg Gly Val Val Glu Asn Tyr Asn Asp Glu
             245                 250                 255

Glu Val Ser Ile Arg Val Gly Gly Asn Thr Gln Pro Ser Lys Val Leu
```

1425

```
                    260                    265                    270

    Asn Lys Lys Asn Val Glu Ala Ile Gly Leu Leu Gly Gly Gln Lys Ser
            275                    280                    285

    Lys Ala Asp Tyr Glu Leu Tyr Asn Lys Ala Ser Asn Pro Asp Lys Val
            290                    295                    300

    Ala Ser Thr Ala Phe Ala Glu Asn Arg Asn Ser Glu Thr Ser Asp Thr
    305                    310                    315                    320

    Thr Gly Thr His Glu Ser Asp Arg Asn Lys Glu Ser Ser Asp Gln Thr
                    325                    330                    335

    Gly Ile Asn Ile Ser Gly Phe Glu Asn Lys Ile Ser Tyr Val Val Gln
                    340                    345                    350

    Ser Leu Lys Glu Tyr Glu Gly Lys Trp Leu Leu Phe Asp Asp Ser Glu
            355                    360                    365

    Val Lys Val Thr Glu Glu Lys Asp Phe Leu Asn Ser Leu Ser Pro Ser
            370                    375                    380

    Thr Ser Pro Thr Ser Thr Pro Tyr Leu Leu Phe Tyr Lys Lys Leu
    385                    390                    395
```

```
<210> 1369
<211> 260
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1369
Val Phe Xaa Ser Phe Phe Ala Glu Lys Glu Gln Gln Glu Ala Ile Glu
1                   5                   10                  15

His Ile Asp Glu Val Gln Asn Glu Ile Asp Arg Leu Asn Glu Gln Ala
            20                  25                  30

Ser Glu Glu Ile Leu Lys Val Glu Gln Lys Tyr Asn Lys Leu Arg Gln
            35                  40                  45

Pro Ph  Phe Gln Lys Arg Ser Glu Leu Ile Ala Lys Ile Pro Asn Phe
        50                  55                  60
```

```
Trp Val Thr Thr Phe Val Asn His Pro Gln Val Ser Ala Leu Leu Gly
65              70              75              80

Glu Glu Asp Glu Glu Ala Leu His Tyr Leu Thr Arg Val Glu Val Thr
            85              90              95

Glu Phe Glu Asp Ile Lys Ser Gly Tyr Arg Ile Asp Phe Tyr Phe Asp
            100             105             110

Glu Asn Pro Tyr Phe Glu Asn Lys Val Leu Ser Lys Glu Phe His Leu
        115             120             125

Asn Glu Ser Gly Asp Pro Ser Ser Lys Ser Thr Glu Ile Lys Trp Lys
    130             135             140

Ser Gly Lys Asp Leu Thr Lys Arg Ser Ser Gln Thr Gln Asn Lys Ala
145             150             155             160

Ser Arg Lys Arg Gln His Glu Glu Pro Glu Ser Phe Phe Thr Trp Phe
            165             170             175

Thr Asp His Ser Asp Ala Gly Ala Asp Glu Leu Gly Glu Val Ile Lys
            180             185             190

Asp Asp Ile Trp Pro Asn Pro Leu Gln Tyr Tyr Leu Val Pro Asp Met
        195             200             205

Asp Asp Glu Glu Gly Glu Gly Glu Glu Asp Asp Asp Asp Asp Glu Glu
    210             215             220

Glu Glu Gly Leu Glu Asp Ile Asp Glu Glu Gly Asp Glu Asp Glu Gly
225             230             235             240

Glu Glu Asp Glu Asp Asp Asp Glu Gly Glu Glu Gly Glu Glu Asp Glu
            245             250             255

Gly Glu Asp Asp
        260
```

```
<210> 1370
<211> 155
<212> PRT
<213> Homo sapiens

<400> 1370
Lys Gly Glu Ala Ala Ala Phe Ser Ala Thr Phe Pro Ile Ala Arg Gln
1               5               10              15

Glu Phe Leu Ser Val Thr Thr Ile Ala Val Met Ser Gly Arg Gly Lys
```

1427

```
                    20                      25                      30

Gln Gly Gly Lys Ala Arg Ala Lys Ala Lys Ser Arg Ser Ser Arg Ala
        35                  40                  45

Gly Leu Gln Phe Pro Val Gly Glu Cys Ile Ala Leu Arg Lys Gly Asn
    50                  55                  60

Tyr Ala Glu Arg Val Gly Ala Gly Ala Pro Val Tyr Met Ala Ala Val
65                  70                  75                  80

Leu Glu Tyr Leu Thr Ala Glu Ile Leu Glu Leu Ala Gly Asn Ala Ala
                85                  90                  95

Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro Arg His Leu Gln Leu Ala
            100                 105                 110

Ile Arg Asn Asp Glu Glu Leu Asn Lys Leu Leu Gly Lys Val Thr Ile
        115                 120                 125

Ala Gln Gly Gly Val Leu Pro Asn Ile Gln Ala Val Leu Leu Pro Lys
    130                 135                 140

Lys Thr Glu Ser His His Lys Ala Lys Gly Lys
145                 150                 155
```

<210> 1371
<211> 140
<212> PRT
<213> Homo sapiens

<400> 1371
```
Phe Pro Gly Arg Thr His Ala Leu Cys Arg Gly Ala Ala Ser Arg Gly
    1               5                  10                  15

Leu Leu Cys Lys Trp Ala Pro Trp Pro Ser Ala Pro Val Pro Ala Thr
            20                  25                  30

Arg Asp Arg Ala Pro Arg Pro Ala Arg Gly Arg Arg Pro Asp Pro Thr
        35                  40                  45

Ser Gln Gln Ala Lys Ala Trp Arg Pro Ser Pro Ala Ala Arg Ser
    50                  55                  60

Trp Pro Pro Thr Thr Thr Thr Gly Ala Ala Trp Val Pro Leu Pro Ala
65                  70                  75                  80

Thr Ala Pro Ala Ala Val Pro Ser Ala Pro Gly Lys Pro Phe Pro Thr
                85                  90                  95
```

```
Pro Gln Val Ser Pro Arg Leu Thr Arg Val Ile Gly Gly Pro Ala Ser
        100                 105                 110

Phe Ser Gly Ser Pro Pro Ser Arg Ser Trp Pro Arg Cys Trp Ser Pro
        115                 120                 125

Gln Ser Thr Arg Asn Leu Pro Arg Pro Pro Ala Ala
    130                 135                 140
```

<210> 1372
<211> 150
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (128)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (142)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (147)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1372
```
Pro Trp Thr Leu Gly Gly Pro Glu Leu Asp Ala Met Gly Gly Cys Ala
 1               5                   10                  15
```

```
Gly Ser Arg Arg Arg Ph  Ser Asp Ser Glu Gly Glu Glu Thr Val Pro
            20              25                  30

Glu Pro Arg Leu Pro Leu Leu Asp His Gln Gly Ala His Trp Lys Asn
        35      ·           40                  45

Ala Val Gly Phe Trp Leu Leu Gly Leu Cys Asn Asn Phe Ser Tyr Val
    50                  55                  60

Val Met Leu Ser Ala Ala His Asp Ile Leu Ser His Lys Arg Thr Ser
65                  70                  75                  80

Gly Asn Gln Ser His Val Asp Pro Gly Pro Thr Pro Ile Pro His Asn
                85                  90                  95

Ser Ser Ser Arg Phe Asp Cys Asn Ser Val Ser Thr Ala Ala Val Leu
            100             105             110

Leu Ala Asp Ile Leu Pro Thr Leu Val Ile Lys Leu Leu Xaa Xaa Xaa
            115             120             125

Gly Leu His Leu Leu Pro Xaa Thr Val Glu Asp Ala Val Xaa Leu Cys
    130             135             140

Ala Leu Xaa Gly Thr Ala            ·
145             150
```

<210> 1373
<211> 128
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (121)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1373
```
Arg His Ser Arg Val Asp Pro Arg Val Arg Ala Arg Phe Arg Arg Arg
 1           5                  10                  15

Arg Ala Phe Ala Xaa Leu Gly Trp Ser Ser Gly Arg Val Ser Arg Pro
            20                  25                  30
```

```
        Glu His Val Asp Ala His Pro Pro Leu Ser Leu Met Glu Val Val Thr
             35              40              45

        Phe Gly Asp Val Ala Val His Phe Ser Arg Glu Glu Trp Gln Cys Leu
             50              55              60

        Asp Pro Gly Gln Arg Ala Leu Tyr Arg Glu Val Met Leu Glu Asn His
        65              70              75              80

        Ser Ser Val Ala Gly Leu Ala Gly Phe Leu Val Phe Lys Pro Glu Leu
                     85              90              95

        Ile Ser Arg Leu Glu Gln Gly Glu Glu Pro Trp Val Leu Asp Leu Gln
                    100             105             110

        Gly Ala Glu Gly Thr Glu Ala Pro Xaa Thr Ser Lys Thr Gly Glu Ala
                    115             120             125
```

<210> 1374
<211> 398
<212> PRT
<213> Homo sapiens

<400> 1374

```
        Ser Ser Trp Leu Arg Ser Arg Ser Gly Met Gln Thr Asp Leu Gln Asn
        1                5                10              15

        Leu Gly Asn Asp Ser Gly Asp His Ser Asp His Met His Tyr Tyr Gln
                     20              25              30

        Gly Lys Lys Tyr Phe Arg Asp Arg Arg Gly Gly Gly Arg Asn Ser Asp
                     35              40              45

        Trp Ser Ser Asp Thr Asn Arg Gln Gly Gln Gln Ser Ser Ser Asp Cys
             50              55              60

        Tyr Ile Tyr Asp Ser Ala Thr Gly Tyr Tyr Tyr Asp Pro Leu Ala Gly
        65              70              75              80

        Thr Tyr Tyr Asp Pro Asn Thr Gln Gln Glu Val Tyr Val Pro Gln Asp
                     85              90              95

        Pro Gly Leu Pro Glu Glu Glu Glu Ile Lys Glu Lys Lys Pro Thr Ser
                    100             105             110

        Gln Gly Lys Ser Ser Ser Lys Lys Glu Met Ser Lys Arg Asp Gly Lys
```

1431

```
                   115                    120                    125
   Glu Lys Lys Asp Arg Gly Val Thr Arg Phe Gln Glu Asn Ala Ser Glu
       130                 135                 140

   Gly Lys Ala Pro Ala Glu Asp Val Phe Lys Lys Pro Leu Pro Pro Thr
   145                 150                 155                 160

   Val Lys Lys Glu Glu Ser Pro Pro Pro Lys Val Val Asn Pro Leu
                       165                 170                 175

   Ile Gly Leu Leu Gly Glu Tyr Gly Gly Asp Ser Asp Tyr Glu Glu Glu
               180                 185                 190

   Glu Glu Glu Glu Gln Thr Pro Pro Pro Gln Pro Arg Thr Ala Gln Pro
               195                 200                 205

   Gln Lys Arg Glu Glu Gln Thr Lys Lys Glu Asn Glu Glu Asp Lys Leu
       210                 215                 220

   Thr Asp Trp Asn Lys Leu Ala Cys Leu Leu Cys Arg Arg Gln Phe Pro
   225                 230                 235                 240

   Asn Lys Glu Val Leu Ile Lys His Gln Gln Leu Ser Asp Leu His Lys
                   245                 250                 255

   Gln Asn Leu Glu Ile His Arg Lys Ile Lys Gln Ser Glu Gln Glu Leu
               260                 265                 270

   Ala Tyr Leu Glu Arg Arg Glu Arg Glu Gly Lys Phe Lys Gly Arg Gly
       275                 280                 285

   Asn Asp Arg Arg Glu Lys Leu Gln Ser Phe Asp Ser Pro Glu Arg Lys
       290                 295                 300

   Arg Ile Lys Tyr Ser Arg Glu Thr Asp Ser Asp Arg Lys Leu Val Asp
   305                 310                 315                 320

   Lys Glu Asp Ile Asp Thr Ser Ser Lys Gly Gly Cys Val Gln Gln Ala
                   325                 330                 335

   Thr Gly Trp Arg Lys Gly Thr Gly Leu Gly Tyr Gly His Pro Gly Leu
               340                 345                 350

   Ala Ser Ser Glu Glu Ala Glu Gly Arg Met Arg Gly Pro Ser Val Gly
           355                 360                 365

   Ala Ser Gly Arg Thr Ser Lys Arg Gln Ser Asn Glu Thr Tyr Arg Asp
       370                 375                 380

   Ala Val Arg Arg Val Met Phe Ala Arg Tyr Lys Glu Leu Asp
```

385   390   395

<210> 1375
<211> 167
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (157)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (161)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (163)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1375
His Arg Gly Lys Arg Tyr Thr Asp Ser Thr Val Arg Asn Ser Arg Val
 1   5   10   15

Asp Pro Arg Val Arg Ser Ala Lys Pro Glu Ser Cys Pro Phe Ser Leu
            20   25   30

Pro Gly Gln His Glu Leu His His Ser Leu His Leu Leu His Gln Leu
        35   40   45

Pro Val Pro Gly Leu Cys Pro Gly Ala Gln Leu Arg Arg Pro Ala Gly
    50   55   60

Gln Gln Arg Gly Gln Arg Leu Cys Arg Arg Trp Gly Leu Trp Phe Pro
65   70   75   80

Asp Leu Arg Val Pro Leu His Gln Leu Gln Gly Arg His Gly Val Arg
                85   90   95

Gly Pro Gly His Arg Asp Ser Arg Gly Ser Gly Arg Asn Gly Ser Ile
            100   105   110

Gln Asn Glu Lys Glu Thr Met Gln Lys Leu Asn Asp Arg Leu Ala Ser
        115   120   125

Tyr Leu Asp Lys Met Lys Glu Pro Gly Asp Arg Glu Thr Gly Gly Trp
    130   135   140

```
Lys Ala Lys Thr Arg Glu His Phe Gly Glu Glu Gly Xaa Gln Val Arg
145             150             155             160

Xaa Trp Xaa Pro Leu Ile Gln
                165
```

<210> 1376
<211> 448
<212> PRT
<213> Homo sapiens

<400> 1376
```
Leu Pro Asp Val Glu Lys Leu Gly Arg Arg Arg Gly Arg Lys Met Asp
  1             5               10              15

Ser Val Glu Lys Gly Ala Ala Thr Ser Val Ser Asn Pro Arg Gly Arg
            20              25              30

Pro Ser Arg Gly Arg Pro Pro Lys Leu Gln Arg Asn Ser Arg Gly Gly
          35              40              45

Gln Gly Arg Gly Val Glu Lys Pro Pro His Leu Ala Ala Leu Ile Leu
    50              55              60

Ala Arg Gly Gly Ser Lys Gly Ile Pro Leu Lys Asn Ile Lys His Leu
 65              70              75              80

Ala Gly Val Pro Leu Ile Gly Trp Val Leu Arg Ala Ala Leu Asp Ser
              85              90              95

Gly Ala Phe Gln Ser Val Trp Val Ser Thr Asp His Asp Glu Ile Glu
            100             105             110

Asn Val Ala Lys Gln Phe Gly Ala Gln Val His Arg Arg Ser Ser Glu
          115             120             125

Val Ser Lys Asp Ser Ser Thr Ser Leu Asp Ala Ile Ile Glu Phe Leu
    130             135             140

Asn Tyr His Asn Glu Val Asp Ile Val Gly Asn Ile Gln Ala Thr Ser
145             150             155             160

Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met Ile Arg
              165             170             175

Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His Gln Phe
            180             185             190
```

```
Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu Pro Leu
        195             200             205

Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp Gly Glu
    210             215             220

Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu Ile Glu
225             230             235             240

Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met Arg Ala
            245             250             255

Glu His Ser Val Asp Ile Asp Val Asp Ile Asp Trp Pro Ile Ala Glu
            260             265             270

Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu Lys Glu
        275             280             285

Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn Gly His
    290             295             300

Ile Tyr Val Ser Gly Asp Gln Lys Glu Ile Ile Ser Tyr Asp Val Lys
305             310             315             320

Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu Val Arg
            325             330             335

Leu Ile Ser Glu Arg Ala Cys Ser Lys Gln Thr Leu Ser Ser Leu Lys
        340             345             350

Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala Val Val
        355             360             365

Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val Ala Tyr
    370             375             380

Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val Gly Leu
385             390             395             400

Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala Val Gly
            405             410             415

Tyr Ile Cys Lys Cys Asn Gly Gly Arg Gly Ala Ile Arg Glu Phe Ala
        420             425             430

Glu His Ile Cys Leu Leu Met Glu Lys Val Asn Asn Ser Cys Gln Lys
        435             440             445
```

```
<210> 1377
<211> 469
<212> PRT
<213> Homo sapiens

<400> 1377
Gly Gly Pro Ala Lys Met Ala Ala Ser Cys Leu Val Leu Leu Ala Leu
 1               5                  10                  15

Cys Leu Leu Leu Pro Leu Leu Leu Leu Gly Gly Trp Lys Arg Trp Arg
            20                  25                  30

Arg Gly Arg Ala Ala Arg His Val Val Ala Val Val Leu Gly Asp Val
        35                  40                  45

Gly Arg Ser Pro Arg Met Gln Tyr His Ala Leu Ser Leu Ala Met His
    50                  55                  60

Gly Phe Ser Val Thr Leu Leu Gly Phe Cys Asn Ser Lys Pro His Asp
65                  70                  75                  80

Glu Leu Leu Gln Asn Asn Arg Ile Gln Ile Val Gly Leu Thr Glu Leu
                85                  90                  95

Gln Ser Leu Ala Val Gly Pro Arg Val Phe Gln Tyr Gly Val Lys Val
            100                 105                 110

Val Leu Gln Ala Met Tyr Leu Leu Trp Lys Leu Met Trp Arg Glu Pro
        115                 120                 125

Gly Ala Tyr Ile Phe Leu Gln Asn Pro Pro Gly Leu Pro Ser Ile Ala
    130                 135                 140

Val Cys Trp Phe Val Gly Cys Leu Cys Gly Ser Lys Leu Val Ile Asp
145                 150                 155                 160

Trp His Asn Tyr Gly Tyr Ser Ile Met Gly Leu Val His Gly Pro Asn
                165                 170                 175

His Pro Leu Val Leu Leu Ala Lys Trp Tyr Glu Lys Phe Phe Gly Arg
            180                 185                 190

Leu Ser His Leu Asn Leu Cys Val Thr Asn Ala Met Arg Glu Asp Leu
            195                 200                 205

Ala Asp Asn Trp His Ile Arg Ala Val Thr Val Tyr Asp Lys Pro Ala
    210                 215                 220

Ser Phe Phe Lys Glu Thr Pro Leu Asp Leu Gln His Arg Leu Phe Met
```

1436

```
225                  230                  235                  240

Lys Leu Gly Ser Met His Ser Pro Phe Arg Ala Arg Ser Glu Pro Glu
            245                  250                  255

Asp Pro Val Thr Glu Arg Ser Ala Phe Thr Glu Arg Asp Ala Gly Ser
            260                  265                  270

Gly Leu Val Thr Arg Leu Arg Glu Arg Pro Ala Leu Leu Val Ser Ser
            275                  280                  285

Thr Ser Trp Thr Glu Asp Glu Asp Phe Ser Ile Leu Leu Ala Ala Leu
    290                  295                  300

Glu Lys Phe Glu Gln Leu Thr Leu Asp Gly His Asn Leu Pro Ser Leu
305                  310                  315                  320

Val Cys Val Ile Thr Gly Lys Gly Pro Leu Arg Glu Tyr Tyr Ser Arg
            325                  330                  335

Leu Ile His Gln Lys His Phe Gln His Ile Gln Val Cys Thr Pro Trp
            340                  345                  350

Leu Glu Ala Glu Asp Tyr Pro Leu Leu Leu Gly Ser Ala Asp Leu Gly
        355                  360                  365

Val Cys Leu His Thr Ser Ser Ser Gly Leu Asp Leu Pro Met Lys Val
    370                  375                  380

Val Asp Met Phe Gly Cys Cys Leu Pro Val Cys Ala Val Asn Phe Lys
385                  390                  395                  400

Cys Leu His Glu Leu Val Lys His Glu Glu Asn Gly Leu Val Phe Glu
            405                  410                  415

Asp Ser Glu Glu Leu Ala Ala Gln Leu Gln Met Leu Phe Ser Asn Phe
        420                  425                  430

Pro Asp Pro Ala Gly Lys Leu Asn Gln Phe Arg Lys Asn Leu Arg Glu
        435                  440                  445

Ser Gln Gln Leu Arg Trp Asp Glu Ser Trp Val Gln Thr Val Leu Pro
    450                  455                  460

Leu Val Met Asp Thr
465
```

<210> 1378
<211> 314

<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1378
Glu Lys Ala Ala Gly Ala Gly Lys Ser His Leu Ala Ile Val Gln Lys
 1   5   10   15

Val Asn Asn Glu Gly Glu Gly Asp Pro Phe Tyr Glu Val Leu Gly Leu
            20   25   30

Val Thr Leu Glu Asp Val Ile Glu Glu Ile Ile Lys Ser Glu Ile Leu
        35   40   45

Asp Glu Ser Asp Met Tyr Thr Asp Asn Arg Ser Arg Lys Arg Val Ser
        50   55   60

Glu Lys Asn Lys Arg Asp Phe Ser Ala Phe Lys Asp Ala Asp Asn Glu
65   70   75   80

Leu Lys Val Lys Ile Ser Pro Gln Leu Leu Leu Ala Xaa His Arg Phe
                85   90   95

Leu Ala Thr Glu Val Ser Gln Phe Ser Pro Ser Leu Ile Ser Glu Lys
            100   105   110

Ile Leu Leu Arg Leu Leu Lys Tyr Pro Asp Val Ile Gln Glu Leu Lys
        115   120   125

Phe Asp Glu His Asn Lys Tyr Tyr Ala Arg His Tyr Leu Tyr Thr Arg
    130   135   140

Asn Lys Pro Ala Asp Tyr Phe Ile Leu Ile Leu Gln Gly Lys Val Glu
145   150   155   160

Val Glu Ala Gly Lys Glu Asn Met Lys Phe Glu Thr Gly Ala Phe Ser
                165   170   175

Tyr Tyr Gly Thr Met Ala Leu Thr Ser Val Pro Ser Asp Arg Ser Pro
            180   185   190

Ala His Pro Thr Pro Leu Ser Arg Ser Ala Ser Leu Ser Tyr Pro Asp
        195   200   205

Arg Thr Asp Val Ser Thr Ala Ala Thr Leu Ala Gly Ser Ser Asn Gln
    210   215   220

```
Phe Gly Ser Ser Val Leu Gly Gln Tyr Ile Ser Asp Phe Ser Val Arg
225             230             235             240

Ala Leu Val Asp Leu Gln Tyr Ile Lys Ile Thr Arg Gln Gln Tyr Gln
                245             250             255

Asn Gly Leu Leu Ala Ser Arg Met Glu Asn Ser Pro Gln Phe Pro Ile
            260             265             270

Asp Gly Cys Thr Thr His Met Glu Asn Leu Ala Glu Lys Ser Glu Leu
            275             280             285

Pro Val Val Asp Glu Thr Thr Thr Leu Leu Asn Glu Arg Asn Ser Leu
    290             295             300

Leu His Lys Ala Ser His Glu Asn Ala Ile
305             310
```

<210> 1379
<211> 131
<212> PRT
<213> Homo sapiens

<400> 1379
```
Ser Cys Pro Val Leu Lys Met Phe Pro Glu Gln Gln Lys Glu Glu Phe
1             5             10              15

Val Ser Val Trp Val Arg Asp Pro Arg Ile Gln Lys Glu Asp Phe Trp
            20              25              30

His Ser Tyr Ile Asp Tyr Glu Ile Cys Ile His Thr Asn Ser Met Cys
            35              40              45

Phe Thr Met Lys Thr Ser Cys Val Arg Arg Arg Tyr Arg Glu Phe Val
    50              55              60

Trp Leu Arg Gln Arg Leu Gln Ser Asn Ala Leu Leu Val Gln Leu Pro
65              70              75              80

Glu Leu Pro Ser Lys Asn Leu Phe Phe Asn Met Asn Asn Arg Gln His
            85              90              95

Val Asp Gln Arg Arg Gln Gly Leu Gly Asn Phe Leu Arg Lys Val Leu
            100             105             110

Gln Met His Phe Cys Phe Gln Ile Ala Ala Phe Thr Ser Ser Leu Gln
    115             120             125

Ser His Leu
```

1439

130

<210> 1380
<211> 219
<212> PRT
<213> Homo sapiens

<400> 1380

```
Pro Gly Ala Ala Trp Ser Arg Pro Asp Leu Arg Gly Cys Cys Thr Gly
 1               5                  10                  15

Pro Gln Pro Ala Leu Arg Met Leu Val Leu Pro Ser Pro Cys Pro Gln
            20                  25                  30

Pro Leu Ala Phe Ser Ser Val Glu Thr Met Glu Gly Pro Pro Arg Arg
            35                  40                  45

Thr Cys Arg Ser Pro Glu Pro Gly Pro Ser Ser Ser Ile Gly Ser Pro
        50                  55                  60

Gln Ala Ser Ser Pro Pro Arg Pro Asn His Tyr Leu Leu Ile Asp Thr
65                  70                  75                  80

Gln Gly Val Pro Tyr Thr Val Leu Val Asp Glu Glu Ser Gln Arg Glu
                85                  90                  95

Pro Gly Ala Ser Gly Ala Pro Gly Gln Lys Lys Cys Tyr Ser Cys Pro
            100                 105                 110

Val Cys Ser Arg Val Phe Glu Tyr Met Ser Tyr Leu Gln Arg His Ser
        115                 120                 125

Ile Thr His Ser Glu Val Lys Pro Phe Glu Cys Asp Ile Cys Gly Lys
        130                 135                 140

Ala Phe Lys Arg Ala Ser His Leu Ala Arg His His Ser Ile His Leu
145                 150                 155                 160

Ala Gly Gly Gly Arg Pro His Gly Cys Pro Leu Cys Pro Arg Arg Phe
                165                 170                 175

Arg Asp Ala Gly Glu Leu Ala Gln His Ser Arg Val His Ser Gly Glu
            180                 185                 190

Arg Pro Phe Gln Cys Pro His Cys Pro Arg Arg Phe Met Glu Gln Asn
            195                 200                 205

Thr Leu Gln Lys His Thr Arg Trp Lys His Pro
        210                 215
```

<210> 1381
<211> 275
<212> PRT
<213> Homo sapiens

<400> 1381
Gly Val Ala Leu Phe Lys Ser Ala Ala Gly Asp Gln Pro Thr Ala Ala
 1   5   10   15

Cys Ile Cys Ile Gln Arg Gln Val Pro Pro Val Pro Ala Ala Arg Ala
                20   25   30

Pro Gln Ser Arg Thr Arg Ser Ala Gln Ala Lys Leu Ala Leu Thr Met
            35   40   45

Pro Val Lys Gly Gly Thr Lys Cys Ile Lys Tyr Leu Leu Phe Gly Phe
        50   55   60

Asn Phe Ile Phe Trp Leu Ala Gly Ile Ala Val Leu Ala Ile Gly Leu
65   70   75   80

Trp Leu Arg Phe Asp Ser Gln Thr Lys Ser Ile Phe Glu Gln Glu Thr
                85   90   95

Asn Asn Asn Asn Ser Ser Phe Tyr Thr Gly Val Tyr Ile Leu Ile Gly
                100   105   110

Ala Gly Ala Leu Met Met Leu Val Gly Phe Leu Gly Cys Cys Gly Ala
            115   120   125

Val Gln Glu Ser Gln Cys Met Leu Gly Leu Phe Phe Gly Phe Leu Leu
        130   135   140

Val Ile Phe Ala Ile Glu Ile Ala Ala Ala Ile Trp Gly Tyr Ser His
145   150   155   160

Lys Asp Glu Val Ile Lys Glu Val Gln Glu Phe Tyr Lys Asp Thr Tyr
                165   170   175

Asn Lys Leu Lys Thr Lys Asp Glu Pro Gln Arg Glu Thr Leu Lys Ala
            180   185   190

Ile His Tyr Ala Leu Asn Cys Cys Gly Leu Ala Gly Gly Val Glu Gln
        195   200   205

Phe Ile Ser Asp Ile Cys Pro Lys Lys Asp Val Leu Glu Thr Phe Thr
        210   215   220

```
Val Lys Ser Cys Pro Asp Ala Ile Lys Glu Val Phe Asp Asn Lys Phe
225             230             235             240

His Ile Ile Gly Ala Val Gly Ile Gly Ile Ala Val Val Met Ile Phe
            245             250             255

Gly Met Ile Phe Ser Met Ile Leu Cys Cys Ala Ile Arg Arg Asn Arg
            260             265             270

Glu Met Val
        275
```

```
<210> 1382
<211> 766
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1382
Pro Cys Trp Glu Leu Val Gly Pro Pro Gly Trp Gln Xaa Ile Arg Ala
 1               5               10              15

Xaa Pro Ala Thr Val His Arg Ala Glu Ile Leu Ser Phe Pro Arg Ser
            20              25              30

Lys Thr Ser Glu Pro Ala Lys Arg Gly Arg Thr Ala Ser Ala Ala Met
        35              40              45

Ala Leu Lys Asp Tyr Ala Leu Glu Lys Glu Lys Val Lys Lys Phe Leu
    50              55              60

Gln Glu Phe Tyr Gln Asp Asp Glu Leu Gly Lys Lys Gln Phe Lys Tyr
65              70              75              80

Gly Asn Gln Leu Val Arg Leu Ala His Arg Glu Gln Val Ala Leu Tyr
```

1442

```
                     85                      90                      95

Val Asp Leu Asp Asp Val Ala Glu Asp Asp Pro Glu Leu Val Asp Ser
            100                 105                 110

Ile Cys Glu Asn Ala Arg Arg Tyr Ala Lys Xaa Phe Ala Asp Ala Val
            115                 120                 125

Gln Glu Leu Leu Pro Gln Tyr Lys Glu Arg Glu Val Val Asn Lys Asp
    130                 135                 140

Val Leu Asp Val Tyr Ile Glu His Arg Leu Met Met Glu Gln Arg Ser
145                 150                 155                 160

Arg Asp Pro Gly Met Val Arg Ser Pro Gln Asn Gln Tyr Pro Ala Glu
                165                 170                 175

Leu Met Arg Arg Phe Glu Leu Tyr Phe Gln Gly Pro Ser Ser Asn Lys
                180                 185                 190

Pro Arg Val Ile Arg Glu Val Arg Ala Asp Ser Val Gly Lys Leu Val
        195                 200                 205

Thr Val Arg Gly Ile Val Thr Arg Val Ser Glu Val Lys Pro Lys Met
    210                 215                 220

Val Val Ala Thr Tyr Thr Cys Asp Gln Cys Gly Ala Glu Thr Tyr Gln
225                 230                 235                 240

Pro Ile Gln Ser Pro Thr Phe Met Pro Leu Ile Met Cys Pro Ser Gln
                245                 250                 255

Glu Cys Gln Thr Asn Arg Ser Gly Gly Arg Leu Tyr Leu Gln Thr Arg
            260                 265                 270

Gly Ser Arg Phe Ile Lys Phe Gln Glu Met Lys Met Gln Glu His Ser
        275                 280                 285

Asp Gln Val Pro Val Gly Asn Ile Pro Arg Ser Ile Thr Val Leu Val
    290                 295                 300

Glu Gly Glu Asn Thr Arg Ile Ala Gln Pro Gly Asp His Val Ser Val
305                 310                 315                 320

Thr Gly Ile Phe Leu Pro Ile Leu Arg Thr Gly Phe Arg Gln Val Val
                325                 330                 335

Gln Gly Leu Leu Ser Glu Thr Tyr Leu Glu Ala His Arg Ile Val Lys
            340                 345                 350

Met Asn Lys Ser Glu Asp Asp Glu Ser Gly Ala Gly Glu Leu Thr Arg
```

1443

```
                355                      360                      365

    Glu Glu Leu Arg Gln Ile Ala Glu Glu Asp Phe Tyr Glu Lys Leu Ala
        370                 375                 380

    Ala Ser Ile Ala Pro Glu Ile Tyr Gly His Glu Asp Val Lys Lys Ala
    385                 390                 395                 400

    Leu Leu Leu Leu Leu Val Gly Gly Val Asp Gln Ser Pro Arg Gly Met
                    405                 410                 415

    Lys Ile Arg Gly Asn Ile Asn Ile Cys Leu Met Gly Asp Pro Gly Val
                    420                 425                 430

    Ala Lys Ser Gln Leu Leu Ser Tyr Ile Asp Arg Leu Ala Pro Arg Ser
                435                 440                 445

    Gln Tyr Thr Thr Gly Arg Gly Ser Ser Gly Val Gly Leu Thr Ala Ala
        450                 455                 460

    Val Leu Arg Asp Ser Val Ser Gly Glu Leu Thr Leu Glu Gly Gly Ala
    465                 470                 475                 480

    Leu Val Leu Ala Asp Gln Gly Val Cys Cys Ile Asp Glu Phe Asp Lys
                    485                 490                 495

    Met Ala Glu Ala Asp Arg Thr Ala Ile His Glu Val Met Glu Gln Gln
                500                 505                 510

    Thr Ile Ser Ile Ala Lys Ala Gly Ile Leu Thr Thr Leu Asn Ala Arg
                515                 520                 525

    Cys Ser Ile Leu Ala Ala Ala Asn Pro Ala Tyr Gly Arg Tyr Asn Pro
        530                 535                 540

    Arg Arg Ser Leu Glu Gln Asn Ile Gln Leu Pro Ala Ala Leu Leu Ser
    545                 550                 555                 560

    Arg Phe Asp Leu Leu Trp Leu Ile Gln Asp Arg Pro Asp Arg Asp Asn
                565                 570                 575

    Asp Leu Arg Leu Ala Gln His Ile Thr Tyr Val His Gln His Ser Arg
                580                 585                 590

    Gln Pro Pro Ser Gln Phe Glu Pro Leu Asp Met Lys Leu Met Arg Arg
        595                 600                 605

    Tyr Ile Ala Met Cys Arg Glu Lys Gln Pro Met Val Pro Glu Ser Leu
        610                 615                 620

    Ala Asp Tyr Ile Thr Ala Ala Tyr Val Glu Met Arg Arg Glu Ala Trp
```

```
         625                     630                     635                     640

Ala Ser Lys Asp Ala Thr Tyr Thr Ser Ala Arg Thr Leu Leu Ala Ile
                 645                     650                     655

Leu Arg Leu Ser Thr Ala Leu Ala Arg Leu Arg Met Val Asp Val Val
                 660                     665                     670

Glu Lys Glu Asp Val Asn Glu Ala Ile Arg Leu Met Glu Met Ser Lys
             675                     680                     685

Asp Ser Leu Leu Gly Asp Lys Gly Gln Thr Ala Arg Thr Gln Arg Pro
     690                     695                     700

Ala Asp Val Ile Phe Ala Thr Val Arg Glu Leu Val Ser Gly Gly Arg
705                     710                     715                     720

Ser Val Arg Phe Ser Glu Ala Glu Gln Arg Cys Val Ser Arg Gly Phe
                 725                     730                     735

Thr Pro Ala Gln Phe Gln Ala Ala Leu Asp Glu Tyr Glu Glu Leu Asn
                 740                     745                     750

Val Trp Gln Val Asn Ala Ser Arg Thr Arg Ile Thr Phe Val
                 755                     760                     765
```

```
<210> 1383
<211> 296
<212> PRT
<213> Homo sapiens

<400> 1383
Phe Arg Pro Gly Ser Pro Arg Gln Pro Arg Ala Gln Pro Ile Ser Ala
 1               5                   10                  15

Pro Asp Cys Thr Arg Ala Met Val Gly Arg Arg Ala Leu Ile Val Leu
             20                  25                  30

Ala His Ser Glu Arg Thr Ser Phe Asn Tyr Ala Met Lys Glu Ala Ala
             35                  40                  45

Ala Ala Ala Leu Lys Lys Lys Gly Trp Glu Val Val Glu Ser Asp Leu
     50                  55                  60

Tyr Ala Met Asn Phe Asn Pro Ile Ile Ser Arg Lys Asp Ile Thr Gly
65                  70                  75                  80

Lys Leu Lys Asp Pro Ala Asn Phe Gln Tyr Pro Ala Glu Ser Val Leu
                 85                  90                  95
```

Ala Tyr Lys Glu Gly His Leu Ser Pro Asp Ile Val Ala Glu Gln Lys
            100   105   110

Lys Leu Glu Ala Ala Asp Leu Val Ile Phe Gln Phe Pro Leu Gln Trp
            115   120   125

Phe Gly Val Pro Ala Ile Leu Lys Gly Trp Phe Glu Arg Val Phe Ile
    130   135   140

Gly Glu Phe Ala Tyr Thr Tyr Ala Ala Met Tyr Asp Lys Gly Pro Phe
145   150   155   160

Arg Ser Lys Lys Ala Val Leu Ser Ile Thr Thr Gly Gly Ser Gly Ser
                165   170   175

Met Tyr Ser Leu Gln Gly Ile His Gly Asp Met Asn Val Ile Leu Trp
            180   185   190

Pro Ile Gln Ser Gly Ile Leu His Phe Cys Gly Phe Gln Val Leu Glu
            195   200   205

Pro Gln Leu Thr Tyr Ser Ile Gly His Thr Pro Ala Asp Ala Arg Ile
    210   215   220

Gln Ile Leu Glu Gly Trp Lys Lys Arg Leu Glu Asn Ile Trp Asp Glu
225   230   235   240

Thr Pro Leu Tyr Phe Ala Pro Ser Ser Leu Phe Asp Leu Asn Phe Gln
                245   250   255

Ala Gly Phe Leu Met Lys Lys Glu Val Gln Asp Glu Glu Lys Asn Lys
            260   265   270

Lys Phe Gly Leu Ser Val Gly His His Leu Gly Lys Ser Ile Pro Thr
    275   280   285

Asp Asn Gln Ile Lys Ala Arg Lys
    290   295

<210> 1384
<211> 165
<212> PRT
<213> Homo sapiens

<400> 1384
Asp Pro Arg Thr Met Asn Leu Ala Ile Ser Ile Ala Leu Leu Leu Thr
1   5   10   15

```
Val Leu Gln Val Ser Arg Gly Gln Lys Val Thr Ser Leu Thr Ala Cys
            20                  25              30

Leu Val Asp Gln Ser Leu Arg Leu Asp Cys Arg His Glu Asn Thr Ser
            35              40                  45

Ser Ser Pro Ile Gln Tyr Glu Phe Ser Leu Thr Arg Glu Thr Lys Lys
        50                  55                  60

His Val Leu Phe Gly Thr Val Gly Val Pro Glu His Thr Tyr Arg Ser
65                  70                  75                      80

Arg Thr Asn Phe Thr Ser Lys Tyr Asn Met Lys Val Leu Tyr Leu Ser
                85                  90                  95

Ala Phe Thr Ser Lys Asp Glu Gly Thr Tyr Thr Cys Ala Leu His His
                100             105             110

Ser Gly His Ser Pro Pro Ile Ser Ser Gln Asn Val Thr Val Leu Arg
            115                 120             125

Asp Lys Leu Val Lys Cys Glu Gly Ile Ser Leu Leu Ala Gln Asn Thr
        130                 135             140

Ser Trp Leu Leu Leu Leu Leu Leu Ser Leu Ser Leu Leu Gln Ala Thr
145                 150             155                 160

Asp Phe Met Ser Leu
                165
```

<210> 1385
<211> 399
<212> PRT
<213> Homo sapiens

<400> 1385
```
His Glu Arg Thr Pro Ser Arg Pro Gln Pro Asp Thr Pro Arg Gly Pro
1               5                   10                  15

Pro Val Ser Arg Gly Cys Ser Pro Arg His Gly Thr Gly Pro Arg Leu
            20                  25                  30

Thr Met Ala Ala Ala Arg His Ser Thr Leu Asp Phe Met Leu Gly Ala
            35                  40                  45

Lys Ala Asp Gly Glu Thr Ile Leu Lys Gly Leu Gln Ser Ile Phe Gln
        50                  55                  60

Glu Gln Gly Met Ala Glu S r Val His Thr Trp Gln Asp His Gly Tyr
```

1447

```
     65                      70                      75                      80

 Leu Ala Thr Tyr Thr Asn Lys Asn Gly Ser Phe Ala Asn Leu Arg Ile
              85                      90                      95

 Tyr Pro His Gly Leu Val Leu Leu Asp Leu Gln Ser Tyr Asp Gly Asp
             100                     105                     110

 Ala Gln Gly Lys Glu Glu Ile Asp Ser Ile Leu Asn Lys Val Glu Glu
             115                     120                     125

 Arg Met Lys Glu Leu Ser Gln Asp Ser Thr Gly Arg Val Lys Arg Leu
             130                     135                     140

 Pro Pro Ile Val Arg Gly Gly Ala Ile Asp Arg Tyr Trp Pro Thr Ala
 145                     150                     155                     160

 Asp Gly Arg Leu Val Glu Tyr Asp Ile Asp Glu Val Val Tyr Asp Glu
                     165                     170                     175

 Asp Ser Pro Tyr Gln Asn Ile Lys Ile Leu His Ser Lys Gln Phe Gly
             180                     185                     190

 Asn Ile Leu Ile Leu Ser Gly Asp Val Asn Leu Ala Glu Ser Asp Leu
             195                     200                     205

 Ala Tyr Thr Arg Ala Ile Met Gly Ser Gly Lys Glu Asp Tyr Thr Gly
             210                     215                     220

 Lys Asp Val Leu Ile Leu Gly Gly Gly Asp Gly Gly Ile Leu Cys Glu
 225                     230                     235                     240

 Ile Val Lys Leu Lys Pro Lys Met Val Thr Met Val Glu Ile Asp Gln
                     245                     250                     255

 Met Val Ile Asp Gly Cys Lys Lys Tyr Met Arg Lys Thr Cys Gly Asp
                     260                     265                     270

 Val Leu Asp Asn Leu Lys Gly Asp Cys Tyr Gln Val Leu Ile Glu Asp
             275                     280                     285

 Cys Ile Pro Val Leu Lys Arg Tyr Ala Lys Glu Gly Arg Glu Phe Asp
             290                     295                     300

 Tyr Val Ile Asn Asp Leu Thr Ala Val Pro Ile Ser Thr Ser Pro Glu
 305                     310                     315                     320

 Glu Asp Ser Thr Trp Glu Phe Leu Arg Leu Ile Leu Asp Leu Ser Met
                     325                     330                     335

 Lys Val Leu Lys Gln Asp Gly Lys Tyr Phe Thr Gln Gly Asn Cys Val
```

```
                    340                     345                         350

    Asn Leu Thr Glu Ala Leu Ser Leu Tyr Glu Glu Gln Leu Gly Arg Leu
            355                 360                 365

    Tyr Cys Pro Val Glu Phe Ser Lys Glu Ile Val Cys Val Pro Ser Tyr
            370                 375                 380

    Leu Glu Leu Trp Val Phe Tyr Thr Val Trp Lys Lys Ala Lys Pro
    385                 390                 395
```

<210> 1386
<211> 287
<212> PRT
<213> Homo sapiens

<400> 1386

```
    Phe Asp Cys Arg Asp Val Ala Phe Thr Val Gly Glu Gly Glu Asp His
     1               5                  10                  15

    Asp Ile Pro Ile Gly Ile Asp Lys Ala Leu Glu Lys Met Gln Arg Glu
                20                  25                  30

    Glu Gln Cys Ile Leu Tyr Leu Gly Pro Arg Tyr Gly Phe Gly Glu Ala
            35                  40                  45

    Gly Lys Pro Lys Phe Gly Ile Glu Pro Asn Ala Glu Leu Ile Tyr Glu
            50                  55                  60

    Val Thr Leu Lys Ser Phe Glu Lys Ala Lys Glu Ser Trp Glu Met Asp
    65                  70                  75                  80

    Thr Lys Glu Lys Leu Glu Gln Ala Ala Ile Val Lys Glu Lys Gly Thr
                85                  90                  95

    Val Tyr Phe Lys Gly Gly Lys Tyr Met Gln Ala Val Ile Gln Tyr Gly
                100                 105                 110

    Lys Ile Val Ser Trp Leu Glu Met Glu Tyr Gly Leu Ser Glu Lys Glu
            115                 120                 125

    Ser Lys Ala Ser Glu Ser Phe Leu Leu Ala Ala Phe Leu Asn Leu Ala
            130                 135                 140

    Met Cys Tyr Leu Lys Leu Arg Glu Tyr Thr Lys Ala Val Glu Cys Cys
    145                 150                 155                 160

    Asp Lys Ala Leu Gly Leu Asp Ser Ala Asn Glu Lys Gly Leu Tyr Arg
                165                 170                 175
```

```
Arg Gly Glu Ala Gln Leu Leu Met Asn Glu Phe Glu Ser Ala Lys Gly
            180             185         190

Asp Phe Glu Lys Val Leu Glu Val Asn Pro Gln Asn Lys Ala Ala Arg
            195             200         205

Leu Gln Ile Ser Met Cys Gln Lys Lys Ala Lys Glu His Asn Glu Arg
    210             215         220

Asp Arg Arg Tyr Thr Pro Thr Cys Ser Arg Ser Leu Gln Ser Arg Met
225             230         235                 240

Pro Arg Lys Arg Pro Ile Lys Gln Trp Ala Arg Arg Leu Gln Lys Gly
            245             250         255

Ser Leu Met Lys Lys Glu Gln Thr Val Lys Gln Trp Lys Lys Arg Asn
            260             265         270

Leu Arg Ala Thr Tyr Asp Ala Thr Pro Arg Arg Glu Glu Ser Gln
    275             280         285


<210> 1387
<211> 206
<212> PRT
<213> Homo sapiens

<400> 1387
Arg Leu Pro Ile Arg Gln Ser Ala Ala Asp Gly Leu Arg Ala Arg Pro
 1           5             10          15

Leu Gly Ser Asn Thr Ala Pro Ala Leu Arg Val Met Val Gln Ala Trp
            20              25          30

Tyr Met Asp Asp Ala Pro Gly Asp Pro Arg Gln Pro His Arg Pro Asp
        35              40          45

Pro Gly Arg Pro Val Gly Leu Glu Gln Leu Arg Arg Leu Gly Val Leu
    50              55          60

Tyr Trp Lys Leu Asp Ala Asp Lys Tyr Glu Asn Asp Pro Glu Leu Glu
65              70              75                  80

Lys Ile Arg Arg Glu Arg Asn Tyr Ser Trp Met Asp Ile Ile Thr Ile
            85              90              95

Cys Lys Asp Lys Leu Pro Asn Tyr Glu Glu Lys Ile Lys Met Phe Tyr
            100             105             110
```

1450

```
Glu Glu His Leu His Leu Asp Asp Glu Ile Arg Tyr Ile Leu Asp Gly
        115                 120                 125

Ser Gly Tyr Phe Asp Val Arg Asp Lys Glu Asp Gln Trp Ile Arg Ile
        130                 135                 140

Phe Met Glu Lys Gly Asp Met Val Thr Leu Pro Ala Gly Ile Tyr His
145                 150                 155                 160

Arg Phe Thr Val Asp Glu Lys Asn Tyr Thr Lys Ala Met Arg Leu Phe
                165                 170                 175

Val Gly Glu Pro Val Trp Thr Ala Tyr Asn Arg Pro Ala Asp His Phe
                180                 185                 190

Glu Ala Arg Gly Gln Tyr Val Lys Phe Leu Ala Gln Thr Ala
        195                 200                 205
```

```
<210> 1388
<211> 394
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1388
Phe His Xaa Ala Ala His Tyr Ser Leu Pro Asp Gly Arg His Gly Arg
 1               5                 10                 15

Leu Asp Ser Pro Thr Phe His Leu Thr Leu His Tyr Pro Thr Glu His
                20                 25                 30

Val Gln Phe Trp Val Gly Ser Pro Ser Thr Pro Ala Gly Trp Val Arg
        35                 40                 45

Glu Gly Asp Thr Val Gln Leu Leu Cys Arg Gly Asp Gly Ser Pro Ser
        50                 55                 60

Pro Glu Tyr Thr Leu Phe Arg Leu Gln Asp Glu Gln Glu Glu Val Leu
65                 70                 75                 80

Asn Val Asn Leu Glu Gly Asn Leu Thr Leu Glu Gly Val Thr Arg Gly
                85                 90                 95

Gln Ser Gly Thr Tyr Gly Cys Arg Val Glu Asp Tyr Asp Ala Ala Asp
                100                105                110
```

Asp Val Gln Leu Ser Lys Thr Leu Glu Leu Arg Val Ala Tyr Leu Asp
         115   120   125

Pro Leu Glu Leu Ser Glu Gly Lys Val Leu Ser Leu Pro Leu Asn Ser
         130   135   140

Ser Ala Val Val Asn Cys Ser Val His Gly Leu Pro Thr Pro Ala Leu
145   150   155   160

Arg Trp Thr Lys Asp Ser Thr Pro Leu Gly Asp Gly Pro Met Leu Ser
             165   170   175

Leu Ser Ser Ile Thr Phe Asp Ser Asn Gly Thr Tyr Val Cys Glu Ala
             180   185   190

Ser Leu Pro Thr Val Pro Val Leu Ser Arg Thr Gln Asn Phe Thr Leu
         195   200   205

Leu Val Gln Gly Ser Pro Glu Leu Lys Thr Ala Glu Ile Glu Pro Lys
         210   215   220

Ala Asp Gly Ser Trp Arg Glu Gly Asp Glu Val Thr Leu Ile Cys Ser
· 225   230   235   240

Ala Arg Gly His Pro Asp Pro Lys Leu Ser Trp Ser Gln Leu Gly Gly
             245   250   255

Ser Pro Ala Glu Pro Ile Pro Gly Arg Gln Gly Trp Val Ser Ser Ser
             260   265   270

Leu Thr Leu Lys Val Thr Ser Ala Leu Ser Arg Asp Gly Ile Ser Cys
         275   280   285

Glu Ala Ser Asn Pro His Gly Asn Lys Arg His Val Phe His Phe Gly
         290   295   300

Thr Val Ser Pro Gln Thr Ser Gln Ala Gly Val Ala Val Met Ala Val
305   310   315   320

Ala Val Ser Val Gly Leu Leu Leu Leu Val Val Ala Val Phe Tyr Cys
             325   330   335

Val Arg Arg Lys Gly Gly Pro Cys Cys Arg Gln Arg Arg Glu Lys Gly
             340   345   350

Ala Pro Pro Pro Gly Glu Pro Gly Leu Ser His Ser Gly Ser Glu Gln
         355   360   365

Pro Glu Gln Thr Gly Leu Leu Met Gly Gly Ala Ser Gly Gly Ala Arg
         370   375   380

```
Gly Gly Ser Gly Gly Phe Gly Asp Glu Cys
385             390
```

```
<210> 1389
<211> 264
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1389
Val Gly Cys Arg Trp Ser Arg Val Gly Pro Gln Asn Pro Arg Val Xaa
 1               5               10               15

Leu Pro Pro Pro Thr Leu Ala Met Phe Leu Thr Arg Ser Glu Tyr Asp
             20               25               30

Arg Gly Val Asn Thr Phe Ser Pro Glu Gly Arg Leu Phe Gln Val Glu
         35               40               45

Tyr Ala Ile Glu Ala Ile Lys Leu Gly Ser Thr Ala Ile Gly Ile Gln
     50               55               60

Thr Ser Glu Gly Val Cys Leu Ala Val Glu Lys Arg Ile Thr Ser Pro
 65               70               75               80

Leu Met Glu Pro Ser Ser Ile Glu Lys Ile Val Glu Ile Asp Ala His
             85               90               95

Ile Gly Cys Ala Met Ser Gly Leu Ile Ala Asp Ala Lys Thr Leu Ile
             100             105             110

Asp Lys Ala Arg Val Glu Thr Gln Asn His Trp Phe Thr Tyr Asn Glu
         115             120             125

Thr Met Thr Val Glu Ser Val Thr Gln Ala Val Ser Asn Leu Ala Leu
     130             135             140

Gln Phe Gly Glu Glu Asp Ala Asp Pro Gly Ala Met Ser Arg Pro Phe
145             150             155             160

Gly Val Ala Leu Leu Phe Gly Gly Val Asp Glu Lys Gly Pro Gln Leu
             165             170             175

Phe His Met Asp Pr  Ser Gly Thr Phe Val Gln Cys Asp Ala Arg Ala
```

1453

<pre>
              180   185   190
    Ile Gly Ser Ala Ser Glu Gly Ala Gln Ser Ser Leu Gln Glu Val Tyr
            195   200   205

    His Lys Ser Met Thr Leu Lys Glu Ala Ile Lys Ser Ser Leu Ile Ile
            210   215   220

    Leu Lys Gln Val Met Glu Glu Lys Leu Asn Ala Thr Asn Ile Glu Leu
    225   230   235   240

    Ala Thr Val Gln Pro Gly Gln Asn Phe His Met Phe Thr Lys Glu Glu
                       245   250   255

    Leu Glu Glu Val Ile Lys Asp Ile
                       260
</pre>

<210> 1390
<211> 178
<212> PRT
<213> Homo sapiens

<400> 1390
<pre>
    Gln Lys Leu Glu Leu His Arg Gly Gly Gly Arg Ser Arg Thr Ser Gly
     1   5   10   15

    Ser Pro Gly Leu Phe Gly Leu Ser Ala Arg Arg Leu Leu Ala Ala Ala
                   20   25   30

    Ala Thr Arg Gly Leu Pro Ala Ala Arg Val Arg Trp Glu Ser Ser Phe
                35   40   45

    Ser Arg Thr Val Val Ala Pro Ser Ala Val Ala Gly Lys Arg Pro Pro
         50   55   60

    Glu Pro Thr Thr Pro Trp Gln Glu Asp Pro Glu Pro Glu Asp Glu Asn
    65   70   75   80

    Leu Tyr Glu Lys Asn Pro Asp Ser His Gly Tyr Asp Lys Asp Pro Val
                       85   90   95

    Leu Asp Val Trp Asn Met Arg Leu Val Phe Phe Phe Gly Val Ser Ile
                   100   105   110

    Ile Leu Val Leu Gly Ser Thr Phe Val Ala Tyr Leu Pro Asp Tyr Arg
                115   120   125

    Cys Thr Gly Cys Pro Arg Ala Trp Asp Gly Met Lys Glu Trp Ser Arg
                130   135   140
</pre>

Arg Glu Ala Glu Arg Leu Val Lys Tyr Arg Glu Ala Asn Gly Leu Pro
145   150   155   160

Ile Met Glu Ser Asn Cys Phe Asp Pro Ser Lys Ile Gln Leu Pro Glu
                165   170   175

Asp Glu

<210> 1391
<211> 133
<212> PRT
<213> Homo sapiens

<400> 1391
Val Ile Ile Thr Ser Ile Asn Gln Lys Ile Phe His Pro Leu Arg Ala
  1   5   10   15

Leu Lys Leu Ser Thr Ser Ala Thr Phe Leu Ile Leu Val Leu Gly Gly
            20   25   30

His Val Tyr Gly Leu Phe Asn Phe His Val Pro Tyr Cys Pro Leu Pro
        35   40   45

Ala Val Ala Lys Ala Ser Cys Phe Ser Pro Thr Glu Glu Thr Val Leu
      50   55   60

Cys His Asp Asp Arg Ala Leu Leu Gly Leu Val Phe Leu Val Phe Pro
 65   70   75   80

Phe Trp Gln Cys Gly Leu Gln Glu Leu Asp Val Tyr Ala Gln Gly Ile
            85   90   95

Glu Phe Thr Leu Lys Leu Gly Asn Gly Val Phe Asn Leu Cys Ser Cys
            100   105   110

Leu Phe Ile Leu Leu Phe Ile Phe Cys His Pro Ala Leu Tyr Trp Ala
            115   120   125

Asn Asn Glu Ile Lys
      130

<210> 1392
<211> 401
<212> PRT
<213> Homo sapiens

<400> 1392
Asn Thr Val Leu Lys Lys Met Asp Glu Glu Pro Glu Arg Thr Lys Arg
 1   5   10   15

Trp Glu Gly Gly Tyr Glu Arg Thr Trp Glu Ile Leu Lys Glu Asp Glu
                20   25   30

Ser Gly Ser Leu Lys Ala Thr Ile Glu Asp Ile Leu Phe Lys Ala Lys
             35   40   45

Arg Lys Arg Val Phe Glu His His Gly Gln Val Arg Leu Gly Met Met
     50   55   60

Arg His Leu Tyr Val Val Val Asp Gly Ser Arg Thr Met Glu Asp Gln
65   70   75   80

Asp Leu Lys Pro Asn Arg Leu Thr Cys Thr Leu Lys Leu Leu Glu Tyr
                85   90   95

Phe Val Glu Glu Tyr Phe Asp Gln Asn Pro Ile Ser Gln Ile Gly Ile
                100   105   110

Ile Val Thr Lys Ser Lys Arg Ala Glu Lys Leu Thr Glu Leu Ser Gly
         115   120   125

Asn Pro Arg Lys His Ile Thr Ser Leu Lys Lys Ala Val Asp Met Thr
     130   135   140

Cys His Gly Glu Pro Ser Leu Tyr Asn Ser Leu Ser Ile Ala Met Gln
145   150   155   160

Thr Leu Lys His Met Pro Gly His Thr Ser Arg Glu Val Leu Ile Ile
                165   170   175

Phe Ser Ser Leu Thr Thr Cys Asp Pro Ser Asn Ile Tyr Asp Leu Ile
             180   185   190

Lys Thr Leu Lys Ala Ala Lys Ile Arg Val Ser Val Ile Gly Leu Ser
         195   200   205

Ala Glu Val Arg Val Cys Thr Val Leu Ala Arg Glu Thr Gly Gly Thr
     210   215   220

Tyr His Val Ile Leu Asp Glu Ser His Tyr Lys Glu Leu Leu Thr His
225   230   235   240

His Val Ser Pro Pro Pro Ala Ser Ser Ser Ser Glu Cys Ser Leu Ile
                245   250   255

Arg Met Gly Phe Pro Gln His Thr Ile Ala Ser Leu Ser Asp Gln Asp

```
                   260                    265                    270
Ala Lys Pro Ser Phe Ser Met Ala His Leu Asp Gly Asn Thr Glu Pro
        275                 280                 285

Gly Leu Thr Leu Gly Gly Tyr Phe Cys Pro Gln Cys Arg Ala Lys Tyr
        290                 295                 300

Cys Glu Leu Pro Val Glu Cys Lys Ile Cys Gly Leu Thr Leu Val Ser
305                 310                 315                 320

Ala Pro His Leu Ala Arg Ser Tyr His His Leu Phe Pro Leu Asp Ala
                325                 330                 335

Phe Gln Glu Ile Pro Leu Glu Glu Tyr Asn Gly Glu Arg Phe Cys Tyr
                340                 345                 350

Gly Cys Gln Gly Glu Leu Lys Asp Gln His Val Tyr Val Cys Ala Val
        355                 360                 365

Cys Gln Asn Val Phe Cys Val Asp Cys Asp Val Phe Val His Asp Ser
        370                 375                 380

Leu His Cys Cys Pro Gly Cys Ile His Lys Ile Pro Ala Pro Ser Gly
385                 390                 395                 400

Val
```

```
<210> 1393
<211> 318
<212> PRT
<213> Homo sapiens

<400> 1393
Pro Glu Gly Leu Pro Arg Phe Asn Asn Asn Phe Met Ala Pro Gly Ser
  1               5                 10                  15

Ala Ser Ser Pro Ser Pro Ser Phe Pro Ala Ser Arg Pro Trp Ala Ala
            20                  25                  30

Val Gly Thr Met Ala Ala Ala Ala Ala Gly Pro Ser Pro Gly Ser
            35                  40                  45

Gly Pro Gly Asp Ser Pro Glu Gly Pro Glu Gly Glu Ala Pro Glu Arg
        50              55                  60

Arg Arg Lys Ala His Gly Met Leu Lys Leu Tyr Tyr Gly Leu Ser Glu
 65                 70                  75                  80
```

Gly Glu Ala Ala Gly Arg Pro Ala Gly Pro Asp Pro Leu Asp Pro Thr
                85   90   95

Asp Leu Asn Gly Ala His Phe Asp Pro Glu Val Tyr Leu Asp Lys Leu
            100   105   110

Arg Arg Glu Cys Pro Leu Ala Gln Leu Met Asp Ser Glu Thr Asp Met
        115   120   125

Val Arg Gln Ile Arg Ala Leu Asp Ser Asp Met Gln Thr Leu Val Tyr
    130   135   140

Glu Asn Tyr Asn Lys Phe Ile Ser Ala Thr Asp Thr Ile Arg Lys Met
145   150   155   160

Lys Asn Asp Phe Arg Lys Met Glu Asp Glu Met Asp Arg Leu Ala Thr
            165   170   175

Asn Met Ala Val Ile Thr Asp Phe Ser Ala Arg Ile Ser Ala Thr Leu
            180   185   190

Gln Asp Arg His Glu Arg Ile Thr Lys Leu Ala Gly Val His Ala Leu
        195   200   205

Leu Arg Lys Leu Gln Phe Leu Phe Glu Leu Pro Ser Arg Leu Thr Lys
    210   215   220

Cys Val Glu Leu Gly Ala Tyr Gly Gln Ala Val Arg Tyr Gln Gly Arg
225   230   235   240

Ala Gln Ala Val Leu Gln Gln Tyr Gln His Leu Pro Ser Phe Arg Ala
            245   250   255

Ile Gln Asp Asp Cys Gln Val Ile Thr Ala Arg Leu Ala Gln Gln Leu
            260   265   270

Arg Gln Arg Phe Arg Glu Gly Gly Ser Gly Ala Pro Glu Gln Ala Glu
        275   280   285

Cys Val Glu Leu Leu Leu Ala Leu Gly Glu Pro Ala Glu Glu Leu Cys
        290   295   300

Glu Glu Phe Trp Arg Thr Pro Ala Ala Gly Trp Arg Arg Ser
305   310   315

<210> 1394
<211> 1285
<212> PRT

<213> Homo sapiens

<400> 1394

```
Phe Ser Phe Pro Leu Ser Ser Glu Pro Phe Gln Gly Ser Tyr Lys Val
  1           5                  10                 15

Val Val Gln Lys Lys Ser Gly Gly Arg Thr Glu His Pro Phe Thr Val
         20                  25                 30

Glu Glu Phe Val Leu Pro Lys Phe Glu Val Gln Val Thr Val Pro Lys
         35                  40                 45

Ile Ile Thr Ile Leu Glu Glu Glu Met Asn Val Ser Val Cys Gly Leu
         50                  55                 60

Tyr Thr Tyr Gly Lys Pro Val Pro Gly His Val Thr Val Ser Ile Cys
 65                  70                 75                 80

Arg Lys Tyr Ser Asp Ala Ser Asp Cys His Gly Glu Asp Ser Gln Ala
                 85                  90                 95

Phe Cys Glu Lys Phe Ser Gly Gln Leu Asn Ser His Gly Cys Phe Tyr
             100                 105                110

Gln Gln Val Lys Thr Lys Val Phe Gln Leu Lys Arg Lys Glu Tyr Glu
         115                 120                 125

Met Lys Leu His Thr Glu Ala Gln Ile Gln Glu Glu Gly Thr Val Val
     130                 135                 140

Glu Leu Thr Gly Arg Gln Ser Ser Glu Ile Thr Arg Thr Ile Thr Lys
145                 150                 155                 160

Leu Ser Phe Val Lys Val Asp Ser His Phe Arg Gln Gly Ile Pro Phe
                 165                 170                 175

Phe Gly Gln Val Arg Leu Val Asp Gly Lys Gly Val Pro Ile Pro Asn
             180                 185                 190

Lys Val Ile Phe Ile Arg Gly Asn Glu Ala Asn Tyr Tyr Ser Asn Ala
             195                 200                 205

Thr Thr Asp Glu His Gly Leu Val Gln Phe Ser Ile Asn Thr Thr Asn
     210                 215                 220

Val Met Gly Thr Ser Leu Thr Val Arg Val Asn Tyr Lys Asp Arg Ser
225                 230                 235                 240

Pro Cys Tyr Gly Tyr Gln Trp Val Ser Glu Glu His Glu Glu Ala His
                 245                 250                 255
```

1459

His Thr Ala Tyr Leu Val Phe Ser Pro Ser Lys Ser Ph Val His Leu
                260   265   270

Glu Pro Met Ser His Glu Leu Pro Cys Gly His Thr Gln Thr Val Gln
            275   280   285

Ala His Tyr Ile Leu Asn Gly Gly Thr Leu Leu Gly Leu Lys Lys Leu
        290   295   300

Ser Phe Tyr Tyr Leu Ile Met Ala Lys Gly Gly Ile Val Arg Thr Gly
305   310   315   320

Thr His Gly Leu Leu Val Lys Gln Glu Asp Met Lys Gly His Phe Ser
                325   330   335

Ile Ser Ile Pro Val Lys Ser Asp Ile Ala Pro Val Ala Arg Leu Leu
            340   345   350

Ile Tyr Ala Val Leu Pro Thr Gly Asp Val Ile Gly Asp Ser Ala Lys
        355   360   365

Tyr Asp Val Glu Asn Cys Leu Ala Asn Lys Val Asp Leu Ser Phe Ser
    370   375   380

Pro Ser Gln Ser Leu Pro Ala Ser His Ala His Leu Arg Val Thr Ala
385   390   395   400

Ala Pro Gln Ser Val Cys Ala Leu Arg Ala Val Asp Gln Ser Val Leu
                405   410   415

Leu Met Lys Pro Asp Ala Glu Leu Ser Ala Ser Ser Val Tyr Asn Leu
                420   425   430

Leu Pro Glu Lys Asp Leu Thr Gly Phe Pro Gly Pro Leu Asn Asp Gln
            435   440   445

Asp Asp Glu Asp Cys Ile Asn Arg His Asn Val Tyr Ile Asn Gly Ile
    450   455   460

Thr Tyr Thr Pro Val Ser Ser Thr Asn Glu Lys Asp Met Tyr Ser Phe
465   470   475   480

Leu Glu Asp Met Gly Leu Lys Ala Phe Thr Asn Ser Lys Ile Arg Lys
            485   490   495

Pro Lys Met Cys Pro Gln Leu Gln Gln Tyr Glu Met His Gly Pro Glu
            500   505   510

Gly Leu Arg Val Gly Phe Tyr Glu Ser Asp Val Met Gly Arg Gly His
        515   520   525

Ala Arg Leu Val His Val Glu Glu Pro His Thr Glu Thr Val Arg Lys
    530   535   540

Tyr Phe Pro Glu Thr Trp Ile Trp Asp Leu Val Val Val Asn Ser Ala
545   550   555   560

Gly Val Ala Glu Val Gly Val Thr Val Pro Asp Thr Ile Thr Glu Trp
            565   570   575

Lys Ala Gly Ala Phe Cys Leu Ser Glu Asp Ala Gly Leu Gly Ile Ser
            580   585   590

Ser Thr Ala Ser Leu Arg Ala Phe Gln Pro Phe Phe Val Glu Leu Thr
        595   600   605

Met Pro Tyr Ser Val Ile Arg Gly Glu Ala Phe Thr Leu Lys Ala Thr
    610   615   620

Val Leu Asn Tyr Leu Pro Lys Cys Ile Arg Val Ser Val Gln Leu Glu
625   630   635   640

Ala Ser Pro Ala Phe Leu Ala Val Pro Val Glu Lys Glu Gln Ala Pro
            645   650   655

His Cys Ile Cys Ala Asn Gly Arg Gln Thr Val Ser Trp Ala Val Thr
            660   665   670

Pro Lys Ser Leu Gly Asn Val Asn Phe Thr Val Ser Ala Glu Ala Leu
        675   680   685

Glu Ser Gln Glu Leu Cys Gly Thr Glu Val Pro Ser Val Pro Glu His
    690   695   700

Gly Arg Lys Asp Thr Val Ile Lys Pro Leu Leu Val Glu Pro Glu Gly
705   710   715   720

Leu Glu Lys Glu Thr Thr Phe Asn Ser Leu Leu Cys Pro Ser Gly Gly
            725   730   735

Glu Val Ser Glu Glu Leu Ser Leu Lys Leu Pro Pro Asn Val Val Glu
            740   745   750

Glu Ser Ala Arg Ala Ser Val Ser Val Leu Gly Asp Ile Leu Gly Ser
        755   760   765

Ala Met Gln Asn Thr Gln Asn Leu Leu Gln Met Pro Tyr Gly Cys Gly
    770   775   780

Glu Gln Asn Met Val Leu Phe Ala Pro Asn Ile Tyr Val Leu Asp Tyr
785   790   795   800

```
Leu Asn Glu Thr Gln Gln Leu Thr Pro Glu Ile Lys Ser Lys Ala Ile
            805                 810                 815

Gly Tyr Leu Asn Thr Gly Tyr Gln Arg Gln Leu Asn Tyr Lys His Tyr
            820                 825                 830

Asp Gly Ser Tyr Ser Thr Phe Gly Glu Arg Tyr Gly Arg Asn Gln Gly
            835                 840                 845

Asn Thr Trp Leu Thr Ala Phe Val Leu Lys Thr Phe Ala Gln Ala Arg
    850                 855                 860

Ala Tyr Ile Phe Ile Asp Glu Ala His Ile Thr Gln Ala Leu Ile Trp
865                 870                 875                 880

Leu Ser Gln Arg Gln Lys Asp Asn Gly Cys Phe Arg Ser Ser Gly Ser
            885                 890                 895

Leu Leu Asn Asn Ala Ile Lys Gly Gly Val Glu Asp Glu Val Thr Leu
            900                 905                 910

Ser Ala Tyr Ile Thr Ile Ala Leu Leu Glu Ile Pro Leu Thr Val Thr
            915                 920                 925

His Pro Val Val Arg Asn Ala Leu Phe Cys Leu Glu Ser Ala Trp Lys
    930                 935                 940

Thr Ala Gln Glu Gly Asp His Gly Ser His Val Tyr Thr Lys Ala Leu
945                 950                 955                 960

Leu Ala Tyr Ala Phe Ala Leu Ala Gly Asn Gln Asp Lys Arg Lys Glu
            965                 970                 975

Val Leu Lys Ser Leu Asn Glu Glu Ala Val Lys Lys Asp Asn Ser Val
            980                 985                 990

His Trp Glu Arg Pro Gln Lys Pro Lys Ala Pro Val Gly His Phe Tyr
            995                 1000                1005

Glu Pro Gln Ala Pro Ser Ala Glu Val Glu Met Thr Ser Tyr Val Leu
    1010                1015                1020

Leu Ala Tyr Leu Thr Ala Gln Pro Ala Pro Thr Ser Glu Asp Leu Thr
025                 1030                1035                1040

Ser Ala Thr Asn Ile Val Lys Trp Ile Thr Lys Gln Gln Asn Ala Gln
                1045                1050                1055

Gly Gly Phe Ser Ser Thr Gln Asp Thr Val Val Ala Leu His Ala Leu
                1060                1065                1070
```

Ser Lys Tyr Gly Ala Ala Thr Phe Thr Arg Thr Gly Lys Ala Ala Gln
        1075   1080   1085

Val Thr Ile Gln Ser Ser Gly Thr Phe Ser Ser Lys Phe Gln Val Asp
    1090   1095   1100

Asn Asn Asn Arg Leu Leu Leu Gln Gln Val Ser Leu Pro Glu Leu Pro
105   1110   1115   1120

Gly Glu Tyr Ser Met Lys Val Thr Gly Glu Gly Cys Val Tyr Leu Gln
            1125   1130   1135

Thr Ser Leu Lys Tyr Asn Ile Leu Pro Glu Lys Glu Glu Phe Pro Phe
            1140   1145   1150

Ala Leu Gly Val Gln Thr Leu Pro Gln Thr Cys Asp Glu Pro Lys Ala
        1155   1160   1165

His Thr Ser Phe Gln Ile Ser Leu Ser Val Ser Tyr Thr Gly Ser Arg
    1170   1175   1180

Ser Ala Ser Asn Met Ala Ile Val Asp Val Lys Met Val Ser Gly Phe
185   1190   1195   1200

Ile Pro Leu Lys Pro Thr Val Lys Met Leu Glu Arg Ser Asn His Val
            1205   1210   1215

Ser Arg Thr Glu Val Ser Ser Asn His Val Leu Ile Tyr Leu Asp Lys
        1220   1225   1230

Val Ser Asn Gln Thr Leu Ser Leu Phe Phe Thr Val Leu Gln Asp Val
        1235   1240   1245

Pro Val Arg Asp Leu Lys Pro Ala Ile Val Lys Val Tyr Asp Tyr Tyr
    1250   1255   1260

Glu Thr Asp Glu Phe Ala Ile Ala Glu Tyr Asn Ala Pro Cys Ser Lys
265   1270   1275   1280

Asp Leu Gly Asn Ala
            1285

<210> 1395
<211> 75
<212> PRT
<213> Homo sapiens

<400> 1395
Ile Thr Lys Asn Ile Tyr Ser Asp Leu Lys Asp Leu Ser Ala Lys Asn

```
        1                5                   10                  15
      Gln Ser Ile Ser Cys Pro Ser Ile Ile Val His Ala Cys Leu Leu Leu
                   20                  25                  30

      Phe Thr Cys Ser Ser Ala Gln Thr Val Ser Asn Leu Gly Thr Pro Phe
                   35                  40                  45

      Gly Ala Asp Lys Tyr Ser Ser Ala Phe Ser Pro Gln Ile Tyr Asn Asp
                   50                  55                  60

      Phe Asn Ile Pro Lys Asn Ile Gly Ile Ser Glu
      65                  70                  75
```

<210> 1396
<211> 920
<212> PRT
<213> Homo sapiens

<400> 1396

```
      Arg Thr Arg Gly Ile His Gly Glu Met Arg Leu Phe Val Ser Asp Gly
       1                5                   10                  15

      Val Pro Gly Cys Leu Pro Val Leu Ala Ala Ala Gly Arg Ala Arg Gly
                   20                  25                  30

      Arg Ala Glu Val Leu Ile Ser Thr Val Gly Pro Glu Asp Cys Val Val
                   35                  40                  45

      Pro Phe Leu Thr Arg Pro Lys Val Pro Val Leu Gln Leu Asp Ser Gly
       50                  55                  60

      Asn Tyr Leu Phe Ser Thr Ser Ala Ile Cys Arg Tyr Phe Phe Leu Leu
      65                  70                  75                  80

      Ser Gly Trp Glu Gln Asp Asp Leu Thr Asn Gln Trp Leu Glu Trp Glu
                   85                  90                  95

      Ala Thr Glu Leu Gln Pro Ala Leu Ser Ala Ala Leu Tyr Tyr Leu Val
                   100                 105                 110

      Val Gln Gly Lys Lys Gly Glu Asp Val Leu Gly Ser Val Arg Arg Ala
                   115                 120                 125

      Leu Thr His Ile Asp His Ser Leu Ser Arg Gln Asn Cys Pro Phe Leu
                   130                 135                 140

      Ala Gly Glu Thr Glu Ser Leu Ala Asp Ile Val Leu Trp Gly Ala Leu
      145                 150                 155                 160
```

1464

Tyr Pro Leu Leu Gln Asp Pro Ala Tyr Leu Pro Glu Glu Leu Ser Ala
                165   170   175

Leu His Ser Trp Phe Gln Thr Leu Ser Thr Gln Glu Pro Cys Gln Arg
            180   185   190

Ala Ala Glu Thr Val Leu Lys Gln Gln Gly Val Leu Ala Leu Arg Pro
        195   200   205

Tyr Leu Gln Lys Gln Pro Gln Pro Ser Pro Ala Glu Gly Arg Ala Val
    210   215   220

Thr Asn Glu Pro Glu Glu Glu Leu Ala Thr Leu Ser Glu Glu Glu
225   230   235   240

Ile Ala Met Ala Val Thr Ala Trp Glu Lys Gly Leu Glu Ser Leu Pro
                245   250   255

Pro Leu Arg Pro Gln Gln Asn Pro Val Leu Pro Val Ala Gly Glu Arg
            260   265   270

Asn Val Leu Ile Thr Ser Ala Leu Pro Tyr Val Asn Asn Val Pro His
        275   280   285

Leu Gly Asn Ile Ile Gly Cys Val Leu Ser Ala Asp Val Phe Ala Arg
    290   295   300

Tyr Ser Arg Leu Arg Gln Trp Asn Thr Leu Tyr Leu Cys Gly Thr Asp
305   310   315   320

Glu Tyr Gly Thr Ala Thr Glu Thr Lys Ala Leu Glu Glu Gly Leu Thr
            325   330   335

Pro Gln Glu Ile Cys Asp Lys Tyr His Ile Ile His Ala Asp Ile Tyr
            340   345   350

Arg Trp Phe Asn Ile Ser Phe Asp Ile Phe Gly Arg Thr Thr Thr Pro
            355   360   365

Gln Gln Thr Lys Ile Thr Gln Asp Ile Phe Gln Gln Leu Leu Lys Arg
    370   375   380

Gly Phe Val Leu Gln Asp Thr Val Glu Gln Leu Arg Cys Glu His Cys
385   390   395   400

Ala Arg Phe Leu Ala Asp Arg Phe Val Glu Gly Val Cys Pro Phe Cys
            405   410   415

Gly Tyr Glu Glu Ala Arg Gly Asp Gln Cys Asp Lys Cys Gly Lys Leu
            420   425   430

```
Ile Asn Ala Val Glu Leu Lys Lys Pro Gln Cys Lys Val Cys Arg Ser
        435             440             445

Cys Pro Val Val Gln Ser Ser Gln His Leu Phe Leu Asp Leu Pro Lys
        450             455             460

Leu Glu Lys Arg Leu Glu Glu Trp Leu Gly Arg Thr Leu Pro Gly Ser
465             470             475             480

Asp Trp Thr Pro Asn Ala Gln Phe Ile Thr Arg Ser Trp Leu Arg Asp
                485             490             495

Gly Leu Lys Pro Arg Cys Ile Thr Arg Asp Leu Lys Trp Gly Thr Pro
        500             505             510

Val Pro Leu Glu Gly Phe Glu Asp Lys Val Phe Tyr Val Trp Phe Asp
        515             520             525

Ala Thr Ile Gly Tyr Leu Ser Ile Thr Ala Asn Tyr Thr Asp Gln Trp
        530             535             540

Glu Arg Trp Trp Lys Asn Pro Glu Gln Val Asp Leu Tyr Gln Phe Met
545             550             555             560

Ala Lys Asp Asn Val Pro Phe His Ser Leu Val Phe Pro Cys Ser Ala
                565             570             575

Leu Gly Ala Glu Asp Asn Tyr Thr Leu Val Ser His Leu Ile Ala Thr
        580             585             590

Glu Tyr Leu Asn Tyr Glu Asp Gly Lys Phe Ser Lys Ser Arg Gly Val
        595             600             605

Gly Val Phe Gly Asp Met Ala Gln Asp Thr Gly Ile Pro Ala Asp Ile
        610             615             620

Trp Arg Phe Tyr Leu Leu Tyr Ile Arg Pro Glu Gly Gln Asp Ser Ala
625             630             635             640

Phe Ser Trp Thr Asp Leu Leu Leu Lys Asn Asn Ser Glu Leu Leu Asn
                645             650             655

Asn Leu Gly Asn Phe Ile Asn Arg Ala Gly Met Phe Val Ser Lys Phe
        660             665             670

Phe Gly Gly Tyr Val Pro Glu Met Val Leu Thr Pro Asp Asp Gln Arg
        675             680             685

Leu Leu Ala His Val Thr Leu Glu Leu Gln His Tyr His Gln Leu Leu
        690             695             700
```

```
Glu Lys Val Arg Ile Arg Asp Ala Leu Arg Ser Ile Leu Thr Ile Ser
705             710         715             720

Arg His Gly Asn Gln Tyr Ile Gln Val Asn Glu Pro Trp Lys Arg Ile
                725         730             735

Lys Gly Ser Glu Ala Asp Arg Gln Arg Ala Gly Thr Val Thr Gly Leu
            740         745             750

Ala Val Asn Ile Ala Ala Leu Leu Ser Val Met Leu Gln Pro Tyr Met
        755         760             765

Pro Thr Val Ser Ala Thr Ile Gln Ala Gln Leu Gln Leu Pro Pro Pro
    770         775             780

Ala Cys Ser Ile Leu Leu Thr Asn Phe Leu Cys Thr Leu Pro Ala Gly
785             790         795             800

His Gln Ile Gly Thr Val Ser Pro Leu Phe Gln Lys Leu Glu Asn Asp
            805         810             815

Gln Ile Glu Ser Leu Arg Gln Arg Phe Gly Gly Gly Gln Ala Lys Thr
            820         825             830

Ser Pro Lys Pro Ala Val Val Glu Thr Val Thr Thr Ala Lys Pro Gln
        835         840             845

Gln Ile Gln Ala Leu Met Asp Glu Val Thr Lys Gln Gly Asn Ile Val
    850             855             860

Arg Glu Leu Lys Ala Gln Lys Ala Asp Lys Asn Glu Val Ala Ala Glu
865             870         875             880

Val Ala Lys Leu Leu Asp Leu Lys Lys Gln Leu Ala Val Ala Glu Gly
            885         890             895

Asn Pro Leu Lys Pro Leu Lys Ala Arg Arg Lys Ser Lys Arg Pro Trp
            900         905             910

Leu Ile Glu Ser His Phe Asn Arg
        915         920
```

```
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1397
Lys Met Ala Ala Leu Thr Thr Leu Phe Lys Tyr Ile Asp Glu Asn Gln
 1               5                  10                  15

Asp Arg Tyr Ile Lys Lys Leu Ala Lys Trp Val Ala Ile Gln Ser Val
            20              25                  30

Ser Ala Trp Pro Glu Lys Arg Gly Glu Ile Arg Arg Met Met Glu Val
        35              40                  45

Ala Ala Ala Asp Val Lys Gln Leu Gly Gly Ser Val Glu Leu Val Asp
    50              55                  60

Ile Gly Lys Gln Lys Leu Pro Asp Gly Ser Glu Ile Pro Leu Pro Pro
65              70                  75                  80

Ile Leu Leu Gly Arg Leu Gly Ser Asp Pro Gln Lys Lys Thr Val Cys
            85                  90                  95

Ile Tyr Gly His Leu Asp Val Gln Pro Ala Ala Leu Glu Asp Gly Trp
            100             105             110

Asp Ser Glu Pro Phe Thr Leu Val Glu Arg Asp Gly Lys Leu Xaa Gly
        115             120             125

Arg Gly Ser Thr Asp Asp Lys Gly Pro Val Ala Gly Trp Ile Asn Ala
    130             135             140

Leu Glu Ala Tyr Gln Lys Thr Gly Gln Glu Ile Pro Val Asn Val Arg
145             150             155             160

Phe Cys Leu Glu Gly Met Glu Glu Ser Gly Ser Glu Gly Leu Asp Glu
            165             170             175

Leu Ile Phe Ala Arg Lys Asp Thr Phe Phe Lys Asp Val Asp Tyr Val
        180             185             190

Cys Ile Ser Asp Asn Tyr Trp Leu Gly Lys Lys Lys Pro Cys Ile Thr
    195             200             205

Tyr Gly Leu Arg Gly Ile Cys Tyr Phe Phe Ile Glu Val Glu Cys Ser
    210             215             220

Asn Lys Asp Leu His Ser Gly Val Tyr Gly Gly Ser Val His Glu Ala
225             230             235             240

Met Thr Asp Leu Ile Leu Leu Met Gly Ser Leu Val Asp Lys Arg Gly
```

```
                     245                  250                  255

Asn Ile Leu Ile Pro Gly Ile Asn Glu Ala Val Ala Ala Val Thr Glu
            260              265              270

Glu Glu His Lys Leu Tyr Asp Asp Ile Asp Phe Asp Ile Glu Glu Phe
            275              280              285

Ala Lys Asp Val Gly Ala Gln Ile Leu Leu His Ser His Lys Lys Asp
        290              295              300

Ile Leu Met His Arg Trp Arg Tyr Pro Ser Leu Ser Leu His Gly Ile
305              310              315              320

Glu Gly Ala Phe Ser Gly Ser Gly Ala Lys Thr Val Ile Pro Arg Lys
                325              330              335

Val Val Gly Lys Phe Ser Ile Arg Leu Val Pro Asn Met Thr Pro Glu
            340              345              350

Val Val Gly Glu Gln Val Thr Ser Tyr Leu Thr Lys Lys Phe Ala Glu
            355              360              365

Leu Arg Ser Pro Asn Glu Phe Lys Val Tyr Met Gly His Gly Gly Lys
        370              375              380

Pro Trp Val Ser Asp Phe Ser His Pro His Tyr Leu Ala Gly Arg Arg
385              390              395              400

Ala Met Lys Thr Val Phe Gly Val Glu Pro Asp Leu Thr Arg Glu Gly
                405              410              415

Gly Ser Ile Pro Val Thr Leu Thr Phe Gln Glu Ala Thr Gly Lys Asn
                420              425              430

Val Met Leu Leu Pro Val Gly Ser Ala Asp Asp Gly Ala His Ser Gln
            435              440              445

Asn Glu Lys Leu Asn Arg Tyr Asn Tyr Ile Glu Gly Thr Lys Met Leu
        450              455              460

Ala Ala Tyr Leu Tyr Glu Val Ser Gln Leu Lys Asp
465              470              475
```

```
<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1398
Leu His Leu Xaa Pro Thr Ser Ile Ser Ser Ser Ser Ser Cys Ser Val
 1               5                  10                  15


Ser Ser Val Val Ser Gln Arg Leu Thr Glu Ser Pro Cys Ala Leu Val
             20                  25                  30


Ala Ser Gln Tyr Gly Trp Ser Gly Asn Met Glu Arg Ile Met Lys Ala
             35                  40                  45


Gln Ala Tyr Gln Thr Gly Lys Asp Ile Ser Thr Asn Tyr Tyr Ala Ser
     50                  55                  60


Gln Lys Lys Thr Phe Glu Ile Asn Pro Arg His Pro Leu Ile Arg Asp
 65                  70                  75                  80


Met Leu Arg Arg Ile Lys Glu Asp Glu Asp Lys Thr Val Leu Asp
                 85                  90                  95


Leu Ala Val Val Leu Phe Glu Thr Ala Thr Leu Arg Ser Gly Tyr Leu
             100                 105                 110


Leu Pro Asp Thr Lys Ala Tyr Gly Asp Arg Ile Glu Arg Met Leu Arg
         115                 120                 125


Leu Ser Leu Asn Ile Asp Pro Asp Ala Lys Val Glu Glu Glu Pro Glu
     130                 135                 140


Glu Glu Pro Glu Glu Thr Ala Glu Asp Thr Thr Glu Asp Thr Glu Gln
145                 150                 155                 160


Asp Glu Asp Glu Glu Met Asp Val Gly Thr Asp Glu Glu Glu Glu Thr
                 165                 170                 175


Ala Lys Glu Ser Thr Ala Glu Lys Asp Glu Leu
             180                 185




<210> 1399
<211> 376
<212> PRT
<213> Homo sapiens

<400> 1399
Lys Ser Ser Thr Gly Val Ile Pro Asp Glu Ala Lys Ala Leu Ser Leu
```

1470

```
          1                    5                   10                  15

Leu Ala Pro Ala Asn Ala Val Ala Gly Leu Leu Pro Gly Gly Gly Leu
            20                  25                  30

Leu Pro Thr Pro Asn Pro Leu Thr Gln Ile Gly Ala Val Pro Leu Ala
            35                  40                  45

Ala Leu Gly Ala Pro Thr Leu Asp Pro Ala Leu Ala Ala Leu Gly Leu
    50                  55                  60

Pro Gly Ala Asn Leu Asn Ser Gln Ser Leu Ala Ala Asp Gln Leu Leu
65                  70                  75                  80

Lys Leu Met Ser Thr Val Asp Pro Lys Leu Asn His Val Ala Ala Gly
            85                  90                  95

Leu Val Ser Pro Ser Leu Lys Ser Asp Thr Ser Ser Lys Glu Ile Glu
            100                 105                 110

Glu Ala Met Lys Arg Val Arg Glu Ala Gln Ser Leu Ile Ser Ala Ala
            115                 120                 125

Ile Glu Pro Asp Lys Lys Glu Glu Lys Arg Arg His Ser Arg Ser Arg
    130                 135                 140

Ser Arg Ser Arg Arg Arg Arg Thr Pro Ser Ser Ser Arg His Arg Arg
145                 150                 155                 160

Ser Arg Ser Arg Ser Arg Arg Arg Ser His Ser Lys Ser Arg Ser Arg
            165                 170                 175

Arg Arg Ser Lys Ser Pro Arg Arg Arg Ser His Ser Arg Glu Arg
            180                 185                 190

Gly Arg Arg Ser Arg Ser Thr Ser Lys Thr Arg Asp Lys Lys Lys Glu
            195                 200                 205

Asp Lys Glu Lys Lys Arg Ser Lys Thr Pro Pro Lys Ser Tyr Ser Thr
    210                 215                 220

Ala Arg Arg Ser Arg Ser Ala Ser Arg Glu Arg Arg Arg Arg Ser
225                 230                 235                 240

Arg Ser Gly Thr Arg Ser Pro Lys Lys Pro Arg Ser Pro Lys Arg Lys
            245                 250                 255

Leu Ser Arg Ser Pro Ser Pro Arg Arg His Lys Lys Glu Lys Lys Lys
            260                 265                 270

Asp Lys Asp Lys Glu Arg Ser Arg Asp Glu Arg Glu Arg Ser Thr Ser
```

```
                275                    280                       285

        Lys Lys Lys Lys Ser Lys Asp Lys Glu Lys Asp Arg Glu Arg Lys Ser
            290                 295                 300

        Glu Ser Asp Lys Asp Val Lys Gln Val Thr Arg Asp Tyr Asp Glu Glu
        305                 310                 315                 320

        Glu Gln Gly Tyr Asp Ser Glu Lys Glu Lys Lys Glu Glu Lys Lys Pro
                        325                 330                 335

        Ile Glu Thr Gly Ser Pro Lys Thr Lys Glu Cys Ser Val Glu Lys Gly
                        340                 345                 350

        Thr Gly Asp Ser Leu Arg Glu Ser Lys Val Asn Gly Asp Asp His His
                    355                 360                 365

        Glu Glu Asp Met Asp Met Ser Asp
            370                 375



<210> 1400
<211> 112
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1400
        Thr Ala Gly Leu Thr Ser Arg Gly Trp Gly Ser Leu Pro Pro Ser Leu
         1               5                 10                  15

        Glu Thr Phe Leu Xaa Trp Leu Lys Ser Arg Lys Glu Asn Glu Cys Thr
                     20              25                  30

        Ser Arg Leu Ala Gln Ser Leu Ser Pro Ser Ser Ser Leu Phe Pro Ala
                 35                  40                  45

        Gly Pro Ser Gly Leu Tyr Gly Pro Asp Gly Gly Leu Arg Lys Met Arg
            50                  55                  60

        Gly Leu Trp Phe Ser Gly Ile Pro Ala Gly Ala Thr Pro Ser Cys Leu
        65                  70                  75                  80

        Gln Met Val His Val Pro Ile Pro Pro Ser Arg Pro Leu Leu Cys Leu
                        85                  90                  95
```

```
Leu Cys His Arg Asp Ser Gln Gln Arg Phe Phe Phe Val Leu Ala Val
            100             105             110
```

```
<210> 1401
<211> 69
<212> PRT
<213> Homo sapiens

<400> 1401
Arg Arg Gln Val Gly Ala Ala Ala Val Ala Met Thr Arg Gly Asn Gln
 1               5               10              15

Arg Glu Leu Ala Arg Gln Lys Asn Met Lys Lys Gln Ser Asp Ser Val
            20              25              30

Lys Gly Lys Arg Arg Asp Asp Gly Leu Ser Ala Ala Ala Arg Lys Gln
            35              40              45

Arg Asp Ser Glu Ile Met Gln Gln Lys Gln Lys Lys Ala Asn Glu Lys
        50              55              60

Lys Glu Glu Pro Lys
 65
```

```
<210> 1402
<211> 177
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (162)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (166)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 1402
Arg Pro Pro Arg Arg Xaa Pro Met Asp Gly Pro Ala Ile Ile Thr Gln
1   5   10   15

Val Thr Asn Pro Lys Glu Asp Glu Gly Arg Leu Pro Gly Ala Gly Glu
            20   25   30

Lys Ala Ser Gln Cys Asn Val Ser Leu Lys Lys Gln Arg Ser Arg Ser
        35   40   45

Ile Leu Ser Ser Phe Phe Cys Cys Phe Arg Asp Tyr Asn Val Glu Ala
        50   55   60

Pro Pro Pro Ser Ser Pro Ser Val Leu Pro Pro Leu Val Glu Glu Asn
65   70   75   80

Gly Gly Leu Gln Lys Pro Pro Ala Lys Tyr Leu Leu Pro Glu Val Thr
            85   90   95

Val Leu Asp Tyr Gly Lys Lys Cys Val Val Ile Asp Leu Asp Glu Thr
            100   105   110

Leu Val His Ser Ser Phe Lys Pro Ile Ser Asn Ala Asp Phe Ile Val
        115   120   125

Pro Val Glu Ile Asp Gly Thr Ile His Gln Val Tyr Val Leu Lys Arg
    130   135   140

Pro His Val Asp Glu Phe Leu Gln Arg Met Gly Gln Leu Leu Asn Val
145   150   155   160

Cys Xaa Leu Leu Pro Xaa Gly Gln Val Cys Arg Pro Val Ala Asp Leu
            165   170   175

Leu

<210> 1403
<211> 82
<212> PRT
<213> Homo sapiens

<400> 1403
Lys His Ile Leu Ser Thr Phe Glu Thr Ser Val Leu Glu Gly Arg Leu
1   5   10   15

His Lys Leu Ser Ser Pro Arg Leu Arg Arg Leu Gln Ser Gly Lys Leu
            20   25   30

```
Thr Cys Arg Asn Gly Val Pro Phe Met Leu Tyr Leu Asp Lys Gly Asn
        35              40              45
```

```
Gln Lys Trp Asn Gln Cys Arg Gln Asn Leu Gly Phe Ala Ala Ser Ile
    50              55              60
```

```
Asn Gln Ser Met Thr Asn Arg Gly Ser Leu Lys Cys Lys Gly Thr Asn
65              70              75              80
```

```
Phe Thr
```

<210> 1404
<211> 251
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1404
```
Thr Thr Lys Pro Ala Thr Thr Pro Ser Ser Thr Thr Arg Thr Cys Arg
 1           5               10              15
```

```
Arg Ser Pro Ser Thr Leu Pro Ser Ala Thr Trp Thr Pro Leu Ala Ser
            20              25              30
```

```
Arg Thr Ala His Xaa Leu Pro Arg Xaa Tyr Met Tyr Pro Ser Met Asp
        35              40              45
```

```
Gln Leu Ala Glu Met Leu Pro Gly Val Leu Gln Gln Phe Gly Leu Lys
    50              55              60
```

```
Ser Ile Ile Gly Met Gly Thr Gly Ala Gly Ala Tyr Ile Leu Thr Arg
65              70              75              80
```

```
Phe Ala Leu Asn Asn Pro Glu Met Val Glu Gly Leu Val Leu Ile Asn
            85              90              95
```

```
Val Asn Pro Cys Ala Glu Gly Trp Met Asp Trp Ala Ala S r Lys Ile
            100             105             110
```

```
Ser Gly Trp Thr Gln Ala Leu Pro Asp Met Val Val Ser His Leu Phe
        115             120             125

Gly Lys Glu Glu Met Gln Ser Asn Val Glu Val Val His Thr Tyr Arg
        130             135             140

Gln His Ile Val Asn Asp Met Asn Pro Gly Asn Leu His Leu Phe Ile
145             150             155             160

Asn Ala Tyr Asn Ser Arg Arg Asp Leu Glu Ile Glu Arg Pro Met Pro
                165             170             175

Gly Thr His Thr Val Thr Leu Gln Cys Pro Ala Leu Leu Val Val Gly
            180             185             190

Asp Ser Ser Pro Ala Val Asp Ala Val Val Glu Cys Asn Ser Lys Leu
        195             200             205

Asp Pro Thr Lys Thr Thr Leu Leu Lys Met Ala Asp Cys Gly Gly Leu
        210             215             220

Pro Gln Ile Ser Gln Pro Ala Lys Leu Ala Glu Ala Phe Lys Tyr Phe
225             230             235             240

Val Gln Gly Met Gly Tyr Met Pro Arg Leu Ala
                245             250
```

```
<210> 1405
<211> 127
<212> PRT
<213> Homo sapiens

<400> 1405
Phe Glu Gly Phe Tyr Ser Gly Arg Lys Asn Arg Thr Lys Val Tyr Val
 1               5               10              15

Pro Ser Ser Val Val Leu Ile Asp Leu Phe Phe Leu Phe Glu Thr Lys
            20              25              30

Val Val Ser Val Phe Trp Phe Ser Gly Asn Met Tyr Tyr Ile Val Leu
        35              40              45

Lys Glu Cys Cys Pro Thr Asn Tyr Ser Ser Lys Gln Arg Ile Val Thr
    50              55              60

Ile Asn Lys Val Ser Val Thr Leu Leu Pro Leu Ser His Asn Ile His
 65             70              75              80

Cys Arg Ala Leu Cys Arg Ser Lys Asn Arg Ala Ala Gln Asn Leu Cys
```

1476

```
                        85                    90                    95

Gly Ser Phe Leu Ser Phe Cys Asn Leu Arg His Met Phe Gln Arg Thr
            100                    105                    110


Gly Ile Phe Val Trp Ser Ser Asp Leu Gly Asp His Ser His Asn
        115                    120                    125
```

```
<210> 1406
<211> 230
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (169)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (190)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (192)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (194)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

```
<221> SITE
<222> (217)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (218)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1406
Ala Glu Arg Pro Leu Gln Val Pro Arg Ser Ala Gly Glu Ala Ala Pro
 1               5                  10                  15

His Ser Arg Arg Pro Pro Gly Leu Leu Pro His Ala Pro Arg Ala Ala
            20                  25                  30

Ser Ala Gln Leu Glu Glu Arg Arg Arg Asp Pro His Pro Gly Met Thr
        35                  40                  45

Leu Gln Glu Gly Asp Cys Arg Gly Ser Gln Thr Val Ser Leu Thr Met
    50                  55                  60

Gly Thr Ala Asp Ser Asp Glu Met Ala Pro Glu Ala Pro Gln His Thr
65                  70                  75                  80

His Ile Asp Val His Ile His Gln Glu Xaa Ala Leu Ala Lys Leu Leu
                85                  90                  95

Leu Thr Cys Cys Ser Ala Leu Arg Pro Arg Ala Thr Gln Ala Arg Xaa
            100                 105                 110

Ser Ser Arg Leu Leu Xaa Ala Ser Trp Val Met Gln Ile Val Leu Gly
            115                 120                 125

Ile Leu Ser Ala Val Leu Gly Gly Phe Phe Tyr Ile Arg Asp Tyr Thr
    130                 135                 140

Leu Leu Val Thr Ser Gly Ala Ala Ser Gly Gln Gly Leu Trp Leu Cys
145                 150                 155                 160

Cys Trp Ser Cys Cys Leu His Leu Xaa Glu Thr Gly Trp Tyr Ile Leu
            165                 170                 175

Gly Pro Ala Glu Asp Ser Ala Asn Ala Gly Lys Leu Ser Xaa Gln Xaa
            180                 185                 190

Ser Xaa Ala Ser Asn Phe Gly Asn Glu Glu Phe Arg Tyr Gly Leu Leu
        195                 200                 205

Leu Ile Thr Thr Ser Gly Trp Pro Xaa Xaa Gln Val Arg Val Asp Trp
    210                 215                 220
```

Asn Thr Ser Ser Pro Gln
225   230

<210> 1407
<211> 79
<212> PRT
<213> Homo sapiens

<400> 1407
Arg Gly His Phe Leu Leu Pro Asp Leu Asp Ile Pro Ser Asn Pro Ser
 1   5   10   15

Ser Tyr Ser Met Leu Lys Glu Lys Tyr Ser Gln Met His Tyr Val Asn
             20   25   30

Gly Glu Lys Lys His Ser Ile Val Glu Thr Pro Ile Leu Ala Asn Val
         35   40   45

Phe Trp Ser Val Phe His Phe Thr Val Tyr Ile Pro Ala Leu Lys Thr
         50   55   60

Gln Gly Gln Val Leu Thr Lys Glu Val Cys Ser His Ser Lys Tyr
65   70   75

<210> 1408
<211> 289
<212> PRT
<213> Homo sapiens

<400> 1408
Val Arg Pro Pro Ser His Val Thr Ala Asp Ser Gly Arg Ser Pro Leu
 1   5   10   15

Ser Leu Thr Tyr Leu Pro Leu Gln Glu Pro Gly Asp Met Ala Ala Ala
             20   25   30

Val Pro Arg Ala Ala Phe Leu Ser Pro Leu Leu Pro Leu Leu Leu Gly
         35   40   45

Phe Leu Leu Leu Ser Ala Pro His Gly Gly Ser Gly Leu His Thr Lys
         50   55   60

Gly Ala Leu Pro Leu Asp Thr Val Thr Phe Tyr Lys Val Ile Pro Lys
65   70   75   80

Ser Lys Phe Val Leu Val Lys Phe Asp Thr Gln Tyr Pro Tyr Gly Glu

1479

                    85   90   95

    Lys Gln Asp Glu Phe Lys Arg Leu Ala Glu Asn Ser Ala Ser Ser Asp
                100   105   110

    Asp Leu Leu Val Ala Glu Val Gly Ile Ser Asp Tyr Gly Asp Lys Leu
                115   120   125

    Asn Met Glu Leu Ser Glu Lys Tyr Lys Leu Asp Lys Glu Ser Tyr Pro
            130   135   140

    Val Phe Tyr Leu Phe Arg Asp Gly Asp Phe Glu Asn Pro Val Pro Tyr
    145   150   155   160

    Thr Gly Ala Val Lys Val Gly Ala Ile Gln Arg Trp Leu Lys Gly Gln
                165   170   175

    Gly Val Tyr Leu Gly Met Pro Gly Cys Leu Pro Val Tyr Asp Ala Leu
                180   185   190

    Ala Gly Glu Phe Ile Arg Ala Ser Gly Val Glu Ala Arg Gln Ala Leu
                195   200   205

    Leu Lys Gln Gly Gln Asp Asn Leu Ser Ser Val Lys Glu Thr Gln Lys
            210   215   220

    Lys Trp Ala Glu Gln Tyr Leu Lys Ile Met Gly Lys Ile Leu Asp Gln
    225   230   235   240

    Gly Glu Asp Phe Pro Ala Ser Glu Met Thr Arg Ile Ala Arg Leu Ile
                245   250   255

    Glu Lys Asn Lys Met Ser Asp Gly Lys Lys Glu Glu Leu Gln Lys Ser
                260   265   270

    Leu Asn Ile Leu Thr Ala Phe Gln Lys Lys Gly Ala Glu Lys Glu Glu
            275   280   285

    Leu

    <210> 1409
    <211> 488
    <212> PRT
    <213> Homo sapiens

    <400> 1409
    Pro Ala Ser Ala Gly Thr Val Ser Glu Gly Pro Pro Gly Thr Asp Gly
        1   5   10   15

1480

```
Ser Ala Gly Arg Gly Gly Thr Ala Phe Ala Met Ala Ala Thr Val Asn
            20              25              30

Leu Glu Leu Asp Pro Ile Phe Leu Lys Ala Leu Gly Phe Leu His Ser
            35              40              45

Lys Ser Lys Asp Ser Ala Glu Lys Leu Lys Ala Leu Leu Asp Glu Ser
        50              55              60

Leu Ala Arg Gly Ile Asp Ser Ser Tyr Arg Pro Ser Gln Lys Asp Val
65              70              75              80

Glu Pro Pro Lys Ile Ser Ser Thr Lys Asn Ile Ser Ile Lys Gln Glu
                85              90              95

Pro Lys Ile Ser Ser Ser Leu Pro Ser Gly Asn Asn Asn Gly Lys Val
            100             105             110

Leu Thr Thr Glu Lys Val Lys Lys Glu Ala Glu Lys Arg Pro Ala Asp
        115             120             125

Lys Met Lys Ser Asp Ile Thr Glu Gly Val Asp Ile Pro Lys Lys Pro
    130             135             140

Arg Leu Glu Lys Pro Glu Thr Gln Ser Ser Pro Ile Thr Val Gln Ser
145             150             155             160

Ser Lys Asp Leu Pro Met Ala Asp Leu Ser Ser Phe Glu Glu Thr Ser
            165             170             175

Ala Asp Asp Phe Ala Met Glu Met Gly Leu Ala Cys Val Val Cys Arg
            180             185             190

Gln Met Met Val Ala Ser Gly Asn Gln Leu Val Glu Cys Gln Glu Cys
        195             200             205

His Asn Leu Tyr His Arg Asp Cys His Lys Pro Gln Val Thr Asp Lys
    210             215             220

Glu Ala Asn Asp Pro Arg Leu Val Trp Tyr Cys Ala Arg Cys Thr Arg
225             230             235             240

Gln Met Lys Arg Met Ala Gln Lys Thr Gln Lys Pro Pro Gln Lys Pro
            245             250             255

Ala Pro Ala Val Val Ser Val Thr Pro Ala Val Lys Asp Pro Leu Val
            260             265             270

Lys Lys Pro Glu Thr Lys Leu Lys Gln Glu Thr Thr Ph  Leu Ala Phe
    275             280             285
```

```
Lys Arg Thr Glu Val Lys Thr Ser Thr Val Il  Ser Gly Asn Ser Ser
    290             295             300

Ser Ala Ser Val Ser Ser Ser Val Thr Ser Gly Leu Thr Gly Trp Ala
305             310             315             320

Ala Phe Ala Ala Lys Thr Ser Ser Ala Gly Pro Ser Thr Ala Lys Leu
            325             330             335

Ser Ser Thr Thr Gln Asn Asn Thr Gly Lys Pro Ala Thr Ser Ser Ala
            340             345             350

Asn Gln Lys Pro Val Gly Leu Thr Gly Leu Ala Thr Ser Ser Lys Gly
        355             360             365

Gly Ile Gly Ser Lys Ile Gly Ser Asn Asn Ser Thr Thr Pro Thr Val
    370             375             380

Pro Leu Lys Pro Pro Pro Leu Thr Leu Gly Lys Thr Gly Leu Ser
385             390             395             400

Arg Ser Val Ser Cys Asp Asn Val Ser Lys Val Gly Leu Pro Ser Pro
            405             410             415

Ser Ser Leu Val Pro Gly Ser Ser Ser Gln Leu Ser Gly Asn Gly Asn
            420             425             430

Ser Gly Thr Ser Gly Pro Ser Gly Ser Thr Thr Ser Lys Thr Thr Ser
        435             440             445

Glu Ser Ser Ser Ser Pro Ser Ala Ser Leu Lys Gly Pro Thr Ser Gln
    450             455             460

Glu Ser Gln Leu Asn Ala Met Lys Arg Leu Gln Met Val Lys Lys Lys
465             470             475             480

Ala Ala Gln Lys Lys Leu Lys Lys
                485
```

```
<210> 1410
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids
```

1482

<400> 1410
His Tyr Gly Leu Lys Leu Ala Val Lys Met Pro Asn Thr Val Val Pro
1   5   10   15

Trp Asn Pro Val Tyr Ser Cys Ala Lys Gln Asn Cys Lys Ile Val Lys
            20   25   30

Met Ser Tyr Gln Val Ile Arg Arg Leu Gln Arg His His Leu Phe Phe
        35   40   45

Ile Ser Phe Phe Xaa Leu Thr His Val Val Val Ile Phe Asn Thr Phe
    50   55   60

<210> 1411
<211> 129
<212> PRT
<213> Homo sapiens

<400> 1411
Ala Ala Cys Leu Ala Leu Arg Ile Ala Ala Ala Met Ala Ser Gln Ser
1   5   10   15

Gln Gly Ile Gln Gln Leu Leu Gln Ala Glu Lys Arg Ala Ala Glu Lys
            20   25   30

Val Ser Glu Ala Arg Lys Arg Lys Asn Arg Arg Leu Lys Gln Ala Lys
        35   40   45

Glu Glu Ala Gln Ala Glu Ile Glu Gln Tyr Arg Leu Gln Arg Glu Lys
    50   55   60

Glu Phe Lys Ala Lys Glu Ala Ala Ala Leu Gly Ser Arg Gly Ser Cys
65   70   75   80

Ser Thr Glu Val Glu Lys Glu Thr Gln Glu Lys Met Thr Ile Leu Gln
            85   90   95

Thr Tyr Phe Arg Gln Asn Arg Asp Glu Val Leu Asp Asn Leu Leu Ala
            100   105   110

Phe Val Cys Asp Ile Arg Pro Glu Ile His Glu Asn Tyr Arg Ile Asn
        115   120   125

Gly

```
<210> 1412
<211> 177
<212> PRT
<213> Homo sapiens

<400> 1412
Val Thr Val Pro Ser Ser Ser Ala Ala Gly Thr Leu Phe Gln Gly Leu
 1               5                  10                  15


Cys Gly Ala Pro Asp Ala Pro His Pro Leu Ser Lys Ile Pro Gly Gly
            20                  25                  30


Arg Gly Gly Gly Arg Asp Pro Ser Leu Ser Ala Leu Ile Tyr Lys Asp
        35                  40                  45


Glu Lys Leu Thr Val Thr Gln Asp Leu Pro Val Asn Asp Gly Lys Pro
    50                  55                  60


His Ile Val His Phe Gln Tyr Glu Val Thr Glu Val Lys Val Ser Ser
65                  70                  75                  80


Trp Asp Ala Val Leu Ser Ser Gln Ser Leu Phe Val Glu Ile Pro Asp
            85                  90                  95


Gly Leu Leu Ala Asp Gly Ser Lys Glu Gly Leu Leu Ala Leu Leu Glu
            100                 105                 110


Phe Ala Glu Glu Lys Met Lys Val Asn Tyr Val Phe Ile Cys Phe Arg
            115                 120                 125


Lys Gly Arg Glu Asp Arg Ala Pro Leu Leu Lys Thr Phe Ser Phe Leu
            130                 135                 140


Gly Phe Glu Ile Val Arg Pro Gly His Pro Cys Val Pro Ser Arg Pro
145                 150                 155                 160


Asp Val Met Phe Met Val Tyr Pro Leu Asp Gln Asn Leu Ser Asp Glu
                165                 170                 175


Asp


<210> 1413
<211> 112
<212> PRT
<213> Homo sapiens
```

```
<400> 1413
Ser Gly Leu Arg Leu Ala Met Ser Thr Asn Asn Met Ser Asp Pro Arg
 1               5                  10                  15

Arg Pro Asn Lys Val Leu Arg Tyr Lys Pro Pro Ser Glu Cys Asn
             20              25              30

Pro Ala Leu Asp Asp Pro Thr Pro Asp Tyr Met Asn Leu Leu Gly Met
         35              40              45

Ile Phe Ser Met Cys Gly Leu Met Leu Lys Leu Lys Trp Cys Ala Trp
     50              55              60

Val Ala Val Tyr Cys Ser Phe Ile Ser Phe Ala Asn Ser Arg Ser Ser
 65              70              75              80

Glu Asp Thr Lys Gln Met Met Ser Ser Phe Met Leu Ser Ile Ser Ala
             85              90              95

Val Val Met Ser Tyr Leu Gln Asn Pro Gln Pro Met Thr Pro Pro Trp
             100             105             110
```

```
<210> 1414
<211> 186
<212> PRT
<213> Homo sapiens

<400> 1414
Cys Leu Gly Gly Arg Pro Arg Cys Val Leu Arg Leu Thr Ala Asn Leu
 1               5                  10                  15

Glu Gly Arg Arg Asp Ser Ala Thr His Ala Pro Pro His Pro Arg Leu
             20              25              30

Arg Val Lys Arg Ala Val Gly Pro Glu Ser Pro Pro Leu Trp Gln Trp
             35              40              45

Pro Pro Leu Tyr Ser Ile Leu Pro Ser Gly Arg Ser Ala Val Asn Lys
     50              55              60

Arg Trp Ala Pro Gln Ser Thr Cys Pro Pro Thr Ala Leu Ala Val Leu
 65              70              75              80

Gly Ser Ser Leu Gln Phe Thr Gly Asn Lys Pro Glu Ser Ala Arg Thr
             85              90              95
```

1485

Arg Gly Cys Ser Pro Gly Ser Ala Arg Pro Pro Leu Ser Pro Ala Thr
            100   105   110

Gly Trp Arg Cys Arg Ala Arg Ala Ala Ala Ser Arg Arg Phe Pro Gly
        115   120   125

Ala Pro Gly Pro Glu Glu Arg Ser Pro Gln Ser Lys Gly Gly Asn Thr
    130   135   140

Cys Leu Arg Cys Lys Glu Ile Leu Phe Gln Ser Ile Pro Val Val Gln
145   150   155   160

Thr Asp Thr Val Pro Asn Glu Arg Ser Asp Val Phe Ser Ser Pro Phe
                165   170   175

Leu Ile Cys Phe Leu Thr Gly Leu Arg Phe
            180   185

<210> 1415
<211> 108
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1415
Thr Lys Thr Thr Leu Phe Leu Glu Arg Pro Leu Phe Lys Lys Glu Ser
 1   5   10   15

Ile Thr Pro Thr Val Glu Leu Asn Ala Leu Cys Met Lys Leu Gly Lys
            20   25   30

Lys Pro Met Tyr Lys Pro Val Asp Pro Tyr Ser Arg Met Xaa Ser Thr
        35   40   45

Tyr Asn Tyr Asn Met Arg Gly Gly Ala Tyr Pro Pro Arg Tyr Phe Tyr
    50   55   60

Pro Phe Pro Xaa Pro Pro Leu Leu Tyr Gln Val Glu L u Ser Val Gly
65   70   75   80

1486

```
Gly Gln Gln Phe Asn Gly Lys Gly Lys Thr Arg Gln Ala Ala Lys His
                85                  90                  95

Asp Ala Ala Ala Lys Ala Val Glu Asp Pro Ala Glu
        100                 105
```

```
<210> 1416
<211> 621
<212> PRT
<213> Homo sapiens

<400> 1416
Ala Gly His Arg Ala Gly Val Cys Ser Leu Ser Ala Thr Arg Leu Leu
 1               5                  10                  15

Leu Pro Lys Asp Arg Gly Val Gly Arg Arg Gln Thr Met Trp Thr Leu
            20                  25                  30

Val Ser Trp Val Ala Leu Thr Ala Gly Leu Val Ala Gly Thr Arg Cys
        35                  40                  45

Pro Asp Gly Gln Phe Cys Pro Val Ala Cys Cys Leu Asp Pro Gly Gly
    50                  55                  60

Ala Ser Tyr Ser Cys Cys Arg Pro Leu Leu Asp Lys Trp Pro Thr Thr
65                  70                  75                  80

Leu Ser Arg His Leu Gly Gly Pro Cys Gln Val Asp Ala His Cys Ser
                85                  90                  95

Ala Gly His Ser Cys Ile Phe Thr Val Ser Gly Thr Ser Ser Cys Cys
            100                 105                 110

Pro Phe Pro Glu Ala Val Ala Cys Gly Asp Gly His His Cys Cys Pro
            115                 120                 125

Arg Gly Phe His Cys Ser Ala Asp Gly Arg Ser Cys Phe Gln Arg Ser
        130                 135                 140

Gly Asn Asn Ser Val Gly Ala Ile Gln Cys Pro Asp Ser Gln Phe Glu
145                 150                 155                 160

Cys Pro Asp Phe Ser Thr Cys Cys Val Met Val Asp Gly Ser Trp Gly
                165                 170                 175

Cys Cys Pro Met Pro Gln Ala Ser Cys Cys Glu Asp Arg Val His Cys
                180                 185                 190
```

```
Cys Pro His Gly Ala Phe Cys Asp Leu Val His Thr Arg Cys Ile Thr
        195             200             205

Pro Thr Gly Thr His Pro Leu Ala Lys Lys Leu Pro Ala Gln Arg Thr
        210             215             220

Asn Arg Ala Val Ala Leu Ser Ser Ser Val Met Cys Pro Asp Ala Arg
225             230             235             240

Ser Arg Cys Pro Asp Gly Ser Thr Cys Cys Glu Leu Pro Ser Gly Lys
            245             250             255

Tyr Gly Cys Cys Pro Met Pro Asn Ala Thr Cys Cys Ser Asp His Leu
            260             265             270

His Cys Cys Pro Gln Asp Thr Val Cys Asp Leu Ile Gln Ser Lys Cys
        275             280             285

Leu Ser Lys Glu Asn Ala Thr Thr Asp Leu Leu Thr Lys Leu Pro Ala
        290             295             300

His Thr Val Gly Asp Val Lys Cys Asp Met Glu Val Ser Cys Pro Asp
305             310             315             320

Gly Tyr Thr Cys Cys Arg Leu Gln Ser Gly Ala Trp Gly Cys Cys Pro
            325             330             335

Phe Thr Gln Ala Val Cys Cys Glu Asp His Ile His Cys Cys Pro Ala
            340             345             350

Gly Phe Thr Cys Asp Thr Gln Lys Gly Thr Cys Glu Gln Gly Pro His
        355             360             365

Gln Val Pro Trp Met Glu Lys Ala Pro Ala His Leu Ser Leu Pro Asp
        370             375             380

Pro Gln Ala Leu Lys Arg Asp Val Pro Cys Asp Asn Val Ser Ser Cys
385             390             395             400

Pro Ser Ser Asp Thr Cys Cys Gln Leu Thr Ser Gly Glu Trp Gly Cys
            405             410             415

Cys Pro Ile Pro Glu Ala Val Cys Cys Ser Asp His Gln His Cys Cys
            420             425             430

Pro Gln Gly Tyr Thr Cys Val Ala Glu Gly Gln Cys Gln Arg Gly Ser
        435             440             445

Glu Ile Val Ala Gly Leu Glu Lys Met Pro Ala Arg Arg Ala Ser Leu
        450             455             460
```

Ser His Pro Arg Asp Ile Gly Cys Asp Gln His Thr Ser Cys Pro Val
465   470   475   480

Gly Gln Thr Cys Cys Pro Ser Leu Gly Gly Ser Trp Ala Cys Cys Gln
            485   490   495

Leu Pro His Ala Val Cys Cys Glu Asp Arg Gln His Cys Cys Pro Ala
        500   505   510

Gly Tyr Thr Cys Asn Val Lys Ala Arg Ser Cys Glu Lys Glu Val Val
        515   520   525

Ser Ala Gln Pro Ala Thr Phe Leu Ala Arg Ser Pro His Val Gly Val
        530   535   540

Lys Asp Val Glu Cys Gly Glu Gly His Phe Cys His Asp Asn Gln Thr
545   550   555   560

Cys Cys Arg Asp Asn Arg Gln Gly Trp Ala Cys Cys Pro Tyr Arg Gln
            565   570   575

Gly Val Cys Cys Ala Asp Arg Arg His Cys Cys Pro Ala Gly Phe Arg
            580   585   590

Cys Ala Ala Arg Gly Thr Lys Cys Leu Arg Arg Glu Ala Pro Arg Trp
            595   600   605

Asp Ala Pro Leu Arg Asp Pro Ala Leu Arg Gln Leu Leu
        610   615   620

<210> 1417
<211> 340
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1417
Ser Ala His Ala Ser Glu Arg Ile Ala Xaa Ser Gly Cys Gly Ala Pro
  1   5   10   15

1489

Ala Ala Gly Ala Gly Pro Arg Xaa Arg Ser Leu Gly Ala Asp Pro Gly
            20   25   30

Arg Ala Ala Arg Arg His Glu Gly Gln Gly Gly Glu Gly Gly Arg Arg
        35   40   45

Thr Ala Gly Arg Trp Arg Arg Lys Pro Glu Lys Ser Pro Ser Ala Gln
    50   55   60

Glu Leu Lys Glu Gln Gly Asn Arg Leu Phe Val Gly Arg Lys Tyr Pro
65   70   75   80

Glu Ala Ala Ala Cys Tyr Gly Arg Ala Ile Thr Arg Asn Pro Leu Val
            85   90   95

Ala Val Tyr Tyr Thr Asn Arg Ala Leu Cys Tyr Leu Lys Met Gln Gln
        100   105   110

His Glu Gln Ala Leu Ala Asp Cys Arg Arg Ala Leu Glu Leu Asp Gly
        115   120   125

Gln Ser Val Lys Ala His Phe Phe Leu Gly Gln Cys Gln Leu Glu Met
    130   135   140

Glu Ser Tyr Asp Glu Ala Ile Ala Asn Leu Gln Arg Ala Tyr Ser Leu
145   150   155   160

Ala Lys Glu Gln Arg Leu Asn Phe Gly Asp Asp Ile Pro Ser Ala Leu
            165   170   175

Arg Ile Ala Lys Lys Lys Arg Trp Asn Ser Ile Glu Glu Arg Arg Ile
            180   185   190

His Gln Glu Ser Glu Leu His Ser Tyr Leu Ser Arg Leu Ile Ala Ala
        195   200   205

Glu Arg Glu Arg Glu Leu Glu Glu Cys Gln Arg Asn His Glu Gly Asp
    210   215   220

Glu Asp Asp Ser His Val Arg Ala Gln Gln Ala Cys Ile Glu Ala Lys
225   230   235   240

His Asp Lys Tyr Met Ala Asp Met Asp Glu Leu Phe Ser Gln Val Asp
            245   250   255

Glu Lys Arg Lys Lys Arg Asp Ile Pro Asp Tyr Leu Cys Gly Lys Ile
        260   265   270

Ser Phe Glu Leu Met Arg Glu Pro Cys Ile Thr Pro S r Gly Ile Thr
    275   280   285

```
Tyr Asp Arg Lys Asp Ile Glu Glu His Leu Gln Arg Val Gly His Phe
    290             295         300

Asp Pro Val Thr Arg Ser Pro Leu Thr Gln Glu Gln Leu Ile Pro Asn
305             310             315             320

Leu Ala Met Lys Glu Val Ile Asp Ala Phe Ile Ser Glu Asn Gly Trp
            325             330             335

Val Glu Asp Tyr
            340
```

```
<210>  1418
<211>  235
<212>  PRT
<213>  Homo sapiens

<400>  1418
Ser Pro Arg Pro Leu Arg Phe Cys Gly Gly Ala Arg Ala Arg Arg Pro
  1             5               10              15

Leu Ser Ala Val Ala Arg Pro Ala Arg Ser Ser Asp Pro Leu Arg Ser
            20              25              30

Ala Pro Leu Gly Pro Ala Pro Pro Val Asn Met Ile Arg Cys Gly Leu
        35              40              45

Ala Cys Glu Arg Cys Arg Trp Ile Leu Pro Leu Leu Leu Leu Ser Ala
        50              55              60

Ile Ala Phe Asp Ile Ile Ala Leu Ala Gly Arg Gly Trp Leu Gln Ser
65              70              75              80

Ser Asp His Gly Gln Thr Ser Ser Leu Trp Trp Lys Cys Ser Gln Glu
            85              90              95

Gly Gly Gly Ser Gly Ser Tyr Glu Glu Gly Cys Gln Ser Leu Met Glu
            100             105             110

Tyr Ala Trp Gly Arg Ala Ala Ala Ala Met Leu Phe Cys Gly Phe Ile
        115             120             125

Ile Leu Val Ile Cys Phe Ile Leu Ser Phe Phe Ala Leu Cys Gly Pro
        130             135             140

Gln Met Leu Val Phe Leu Arg Val Ile Gly Gly Leu Leu Ala Leu Ala
145             150             155             160

Ala Val Phe Gln Ile Ile Ser Leu Val Ile Tyr Pro Val Lys Tyr Thr
```

```
                            165                    170                    175
Gln Thr Phe Thr Leu His Ala Asn Arg Ala Val Thr Tyr Ile Tyr Asn
                180                 185                 190

Trp Ala Tyr Gly Phe Gly Trp Ala Ala Thr Ile Ile Leu Ile Gly Cys
            195                 200                 205

Ala Phe Phe Phe Cys Cys Leu Pro Asn Tyr Glu Asp Asp Leu Leu Gly
        210                 215                 220

Asn Ala Lys Pro Arg Tyr Phe Tyr Thr Ser Ala
225                 230                 235
```

<210> 1419
<211> 86
<212> PRT
<213> Homo sapiens

<400> 1419

```
Arg Arg Gln Ala Leu Gln Glu Arg Cys Pro Phe Asn Pro Leu Ser Ala
 1               5                   10                  15

Leu Asp Arg Arg Cys Cys Val Lys Leu Leu Met Asp Ile Tyr Met Arg
                20                  25                  30

Ser Ser Phe Leu Tyr Ala Ile Pro Ala Val Phe Phe Phe Leu Thr Gly
            35                  40                  45

Pro Cys Leu Arg Ile Asn Lys Ser Val Met Ser Glu Thr Lys Val Tyr
    50                  55                  60

Ser Ser Val Cys Arg Cys Val Ala Pro Pro Phe Ser Pro Ala Ala Pro
65                  70                  75                  80

His Ile Gln Ser Arg Ser
                85
```

<210> 1420
<211> 351
<212> PRT
<213> Homo sapiens

<400> 1420

```
Thr Trp Cys Thr Thr Thr Met Leu Ala Ala Arg Leu Val Cys Leu Arg
 1               5                   10                  15
```

1492

```
Thr Leu Pro Ser Arg Val Phe His Pro Ala Phe Thr Lys Ala Ser Pro
        20                  25                  30

Val Val Lys Asn Ser Ile Thr Lys Asn Gln Trp Leu Leu Thr Pro Ser
        35                  40                  45

Arg Glu Tyr Ala Thr Lys Thr Arg Ile Gly Ile Arg Arg Gly Arg Thr
        50                  55                  60

Gly Gln Glu Leu Lys Glu Ala Ala Leu Glu Pro Ser Met Glu Lys Ile
65                  70                  75                  80

Phe Lys Ile Asp Gln Met Gly Arg Trp Phe Val Ala Gly Gly Ala Ala
                85                  90                  95

Val Gly Leu Gly Ala Leu Cys Tyr Tyr Gly Leu Gly Leu Ser Asn Glu
            100                 105                 110

Ile Gly Ala Ile Glu Lys Ala Val Ile Trp Pro Gln Tyr Val Lys Asp
        115                 120                 125

Arg Ile His Ser Thr Tyr Met Tyr Leu Ala Gly Ser Ile Gly Leu Thr
    130                 135                 140

Ala Leu Ser Ala Ile Ala Ile Ser Arg Thr Pro Val Leu Met Asn Phe
145                 150                 155                 160

Met Met Arg Gly Ser Trp Val Thr Ile Gly Val Thr Phe Ala Ala Met
                165                 170                 175

Val Gly Ala Gly Met Leu Val Arg Ser Ile Pro Tyr Asp Gln Ser Pro
            180                 185                 190

Gly Pro Lys His Leu Ala Trp Leu Leu His Ser Gly Val Met Gly Ala
        195                 200                 205

Val Val Ala Pro Leu Thr Ile Leu Gly Gly Pro Leu Leu Ile Arg Ala
    210                 215                 220

Ala Trp Tyr Thr Ala Gly Ile Val Gly Gly Leu Ser Thr Val Ala Met
225                 230                 235                 240

Cys Ala Pro Ser Glu Lys Phe Leu Asn Met Gly Ala Pro Leu Gly Val
                245                 250                 255

Gly Leu Gly Leu Val Phe Val Ser Ser Leu Gly Ser Met Phe Leu Pro
                260                 265                 270

Pro Thr Thr Val Ala Gly Ala Thr Leu Tyr Ser Val Ala Met Tyr Gly
        275                 280                 285
```

```
Gly Leu Val Leu Phe Ser Met Phe Leu Leu Tyr Asp Thr Gln Lys Val
    290             295             300

Ile Lys Arg Ala Glu Val Ser Pro Met Tyr Gly Val Gln Lys Tyr Asp
305             310             315                 320

Pro Ile Asn Ser Met Leu Ser Ile Tyr Met Asp Thr Leu Asn Ile Phe
                325             330                 335

Met Arg Val Ala Thr Met Leu Ala Thr Gly Gly Asn Arg Lys Lys
            340             345             350
```

<210> 1421
<211> 81
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1421
```
Cys Gly Xaa Leu Leu Met Ala Gln Gly Leu Ser Ala Ser Ala Leu Glu
  1             5             10                15

Gly Leu Lys Thr Glu Glu Gly Ser Val Arg Gly Ala Leu Pro Ala Val
            20              25              30

Ser Ser Pro Pro Ala Pro Val Ser Pro Ser Ser Pro Thr Thr His Asn
            35              40              45

Gly Glu Leu Glu Pro Ser Phe Ser Pro Leu Leu Gly Glu Gly Lys Thr
    50              55              60

Pro Glu Thr Leu Leu Pro Gln Lys Cys Trp Gly Gln Gly Gly Pro Gly
 65              70              75              80

Arg
```

<210> 1422
<211> 484
<212> PRT
<213> Homo sapiens

<400> 1422

1494

```
Ala Cys Arg Ser Thr Leu Val Asp Pro Lys Asn Ser Ala Gln Glu Arg
 1               5                  10                  15

Arg Ala Leu Gly Pro Leu Pro Pro Cys Ser Phe Ala Leu Gln Leu Gly
            20                  25                  30

Met Ala Gly Tyr Leu Arg Val Val Arg Ser Leu Cys Arg Ala Ser Gly
            35                  40                  45

Ser Arg Pro Ala Trp Ala Pro Ala Ala Leu Thr Ala Pro Thr Ser Gln
        50                  55                  60

Glu Gln Pro Arg Arg His Tyr Ala Asp Lys Arg Ile Lys Val Ala Lys
65                  70                  75                  80

Pro Val Val Glu Met Asp Gly Asp Glu Met Thr Arg Ile Ile Trp Gln
                85                  90                  95

Phe Ile Lys Glu Lys Leu Ile Leu Pro His Val Asp Ile Gln Leu Lys
            100                 105                 110

Tyr Phe Asp Leu Gly Leu Pro Asn Arg Asp Gln Thr Asp Asp Gln Val
            115                 120                 125

Thr Ile Asp Ser Ala Leu Ala Thr Gln Lys Tyr Ser Val Ala Val Lys
        130                 135                 140

Cys Ala Thr Ile Thr Pro Asp Glu Ala Arg Val Glu Glu Phe Lys Leu
145                 150                 155                 160

Lys Lys Met Trp Lys Ser Pro Asn Gly Thr Ile Arg Asn Ile Leu Gly
                165                 170                 175

Gly Thr Val Phe Arg Glu Pro Ile Ile Cys Lys Asn Ile Pro Arg Leu
            180                 185                 190

Val Pro Gly Trp Thr Lys Pro Ile Thr Ile Gly Arg His Ala His Gly
            195                 200                 205

Asp Gln Tyr Lys Ala Thr Asp Phe Val Ala Asp Arg Ala Gly Thr Phe
        210                 215                 220

Lys Met Val Phe Thr Pro Lys Asp Gly Ser Gly Val Lys Glu Trp Glu
225                 230                 235                 240

Val Tyr Asn Phe Pro Ala Gly Gly Val Gly Met Gly Met Tyr Asn Thr
                245                 250                 255

Asp Glu Ser Ile Ser Gly Phe Ala His Ser Cys Phe Gln Tyr Ala Ile
            260                 265                 270
```

```
Gln Lys Lys Trp Pro Leu Tyr Met Ser Thr Lys Asn Thr Ile Leu Lys
        275             280         285

Ala Tyr Asp Gly Arg Phe Lys Asp Ile Phe Gln Glu Ile Phe Asp Lys
        290             295             300

His Tyr Lys Thr Asp Phe Asp Lys Asn Lys Ile Trp Tyr Glu His Arg
305             310             315             320

Leu Ile Asp Asp Met Val Ala Gln Val Leu Lys Ser Ser Gly Gly Phe
                325             330             335

Val Trp Ala Cys Lys Asn Tyr Asp Gly Asp Val Gln Ser Asp Ile Leu
            340             345             350

Ala Gln Gly Phe Gly Ser Leu Gly Leu Met Thr Ser Val Leu Val Cys
        355             360             365

Pro Asp Gly Lys Thr Ile Glu Ala Glu Ala Ala His Gly Thr Val Thr
        370             375             380

Arg His Tyr Arg Glu His Gln Lys Gly Arg Pro Thr Ser Thr Asn Pro
385             390             395             400

Ile Ala Ser Ile Phe Ala Trp Thr Arg Gly Leu Glu His Arg Gly Lys
                405             410             415

Leu Asp Gly Asn Gln Asp Leu Ile Arg Phe Ala Gln Met Leu Glu Lys
            420             425             430

Val Cys Val Glu Thr Val Glu Ser Gly Ala Met Thr Lys Asp Leu Ala
            435             440             445

Gly Cys Ile His Gly Leu Ser Asn Val Lys Leu Asn Glu His Phe Leu
        450             455             460

Asn Thr Thr Asp Phe Leu Asp Thr Ile Lys Ser Asn Leu Asp Arg Ala
465             470             475             480

Leu Gly Arg Gln
```

<210> 1423
<211> 240
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

1496

<222> (153)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1423
Val Arg Ile Pro Gly Ser Thr His Ala Ser Gly Gly Gly Asp Gly Asp
 1   5   10   15

Met Glu Ser Gly Ala Tyr Gly Ala Ala Lys Ala Gly Gly Ser Phe Asp
                20   25   30

Leu Arg Arg Phe Leu Thr Gln Pro Gln Val Val Ala Arg Ala Val Cys
            35   40   45

Leu Val Phe Ala Leu Ile Val Phe Ser Cys Ile Tyr Gly Glu Gly Tyr
            50   55   60

Ser Asn Ala His Glu Ser Lys Gln Met Tyr Cys Val Phe Asn Arg Asn
65   70   75   80

Glu Asp Ala Cys Arg Tyr Gly Ser Ala Ile Gly Val Leu Ala Phe Leu
                85   90   95

Ala Ser Ala Phe Phe Leu Val Val Asp Ala Tyr Phe Pro Gln Ile Ser
                100   105   110

Asn Ala Thr Asp Arg Lys Tyr Leu Val Ile Gly Asp Leu Leu Phe Ser
            115   120   125

Ala Leu Trp Thr Phe Leu Trp Phe Val Gly Phe Cys Phe Leu Thr Asn
    130   135   140

Gln Trp Ala Val Thr Asn Pro Lys Xaa Val Leu Val Gly Ala Asp Ser
145   150   155   160

Val Arg Ala Ala Ile Thr Phe Ser Phe Ser Ile Phe Ser Trp Gly
                165   170   175

Val Leu Ala Ser Leu Ala Tyr Gln Arg Tyr Lys Ala Gly Val Asp Asp
                180   185   190

Phe Ile Gln Asn Tyr Val Asp Pro Thr Pro Asp Pro Asn Thr Ala Tyr
            195   200   205

Ala Ser Tyr Pro Gly Ala Ser Val Asp Asn Tyr Gln Gln Pro Pro Phe
    210   215   220

Thr Gln Asn Ala Glu Thr Thr Glu Gly Tyr Gln Pro Pro Val Tyr
225   230   235   240

1497

```
<210> 1424
<211> 244
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (221)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1424
Arg Val Arg Arg Gln Ser Ser Gly Asn Leu Thr Met Ala Trp Thr Pro
 1               5                   10                  15

Leu Leu Leu Pro Leu Leu Thr Phe Cys Thr Val Ser Glu Ala Ser Tyr
            20              25                  30

Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser Pro Gly Gln Thr Ala
            35              40                  45

Arg Ile Thr Cys Ser Gly Asp Ala Leu Pro Xaa Lys Tyr Xaa Tyr Trp
     50              55                  60

Tyr Gln Gln Lys Ser Gly Gln Ala Pro Val Leu Val Ile Tyr Glu Asp
 65              70                  75                  80

Thr Arg Arg Pro Ser Ala Ile Pro Glu Arg Phe Ser Ala Ser Ser Ser
                85                  90                  95

Gly Thr Met Ala Thr Leu Thr Ile Ser Gly Ala Gln Val Glu Asp Glu
            100                 105                 110

Ala Asp Tyr Tyr Cys Tyr Ser Thr Asp Ser Ser Ser Tyr Tyr Arg Val
            115                 120                 125

Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln Pro Lys Ala Ala
            130                 135                 140
```

```
Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu Leu Gln Ala Asn
145             150             155                 160

Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr Pro Gly Ala Val
                165             170             175

Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys Ala Gly Val Glu
                180             185             190

Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr Ala Ala Ser Ser
            195             200             205

Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His Xaa Ser Tyr Ser
    210             215             220

Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys Thr Val Ala Pro
225             230             235             240

Thr Glu Cys Ser
```

<210> 1425
<211> 173
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (159)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1425
```
Xaa Val Arg Val Gln Thr Arg Gly Ser Ala Asp Pro Ala Gln Leu Arg
 1               5                  10                  15

Arg His Pro Gly Tyr Lys Arg Thr Ala Ser Ala Thr Leu Ser Asp Pro
            20                  25                  30

Ala Ala Ala Ala Met Gln Pro Ser Ser Leu Leu Pro Leu Ala Leu Cys
        35                  40                  45

Leu Leu Ala Ala Pro Ala Ser Ala Leu Val Arg Ile Pro Leu His Lys
        50                  55                  60

Phe Thr Ser Ile Arg Arg Thr Met Ser Glu Val Gly Gly Ser Val Glu
65                  70                  75                  80

Asp Leu Ile Ala Lys Gly Pro Val Ser Lys Tyr Ser Gln Ala Val Pro
                85                  90                  95

Ala Val Thr Glu Gly Pro Ile Pro Glu Val Leu Lys Asn Tyr Met Asp
            100                 105                 110

Ala Gln Xaa Tyr Gly Glu Ile Gly Ile Gly Thr Pro Pro Gln Cys Phe
        115                 120                 125

Thr Val Val Phe Asp Thr Gly Xaa Xaa Asn Leu Trp Val Pro Ser Ile
    130                 135                 140

His Cys Lys Leu Leu Asp Ile Ala Cys Trp Ile His His Lys Xaa Asn
145                 150                 155                 160

Ser Asp Lys Ser Ser Asn Tyr Val Lys Asn Gly Asn Ser
                165                 170
```

<210> 1426
<211> 351
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1426
```
Ile Arg His Glu Ile Leu Trp Leu Leu Cys Ser His Arg Pro Ala Pro
 1               5                  10                  15
```

1500

Gly Arg Pro Pro Thr His Asn Ala His Asn Trp Arg Leu Gly Gln Ala
                20   25   30

Pro Ala Xaa Trp Tyr Asn Asp Thr Tyr Pro Leu Ser Pro Pro Gln Arg
            35   40   45

Thr Pro Ala Gly Ile Arg Tyr Arg Ile Ala Val Ile Ala Asp Leu Asp
    50   55   60

Thr Glu Ser Arg Ala Gln Glu Glu Asn Thr Trp Phe Ser Tyr Leu Lys
65   70   75   80

Lys Gly Tyr Leu Thr Leu Ser Asp Ser Gly Asp Lys Val Ala Val Glu
                85   90   95

Trp Asp Lys Asp His Gly Val Leu Glu Ser His Leu Ala Glu Lys Gly
            100   105   110

Arg Gly Met Glu Leu Ser Asp Leu Ile Val Phe Asn Gly Lys Leu Tyr
        115   120   125

Ser Val Asp Asp Arg Thr Gly Val Val Tyr Gln Ile Glu Gly Ser Lys
    130   135   140

Ala Val Pro Trp Val Ile Leu Ser Asp Gly Asp Gly Thr Val Glu Lys
145   150   155   160

Gly Phe Lys Ala Glu Trp Leu Ala Val Lys Asp Glu Arg Leu Tyr Val
            165   170   175

Gly Gly Leu Gly Lys Glu Trp Thr Thr Thr Thr Gly Asp Val Val Asn
        180   185   190

Glu Asn Pro Glu Trp Val Lys Val Val Gly Tyr Lys Gly Ser Val Asp
        195   200   205

His Glu Asn Trp Val Ser Asn Tyr Asn Ala Leu Arg Ala Ala Ala Gly
    210   215   220

Ile Gln Pro Pro Gly Tyr Leu Ile His Glu Ser Ala Cys Trp Ser Asp
225   230   235   240

Thr Leu Gln Arg Trp Phe Phe Leu Pro Arg Arg Ala Ser Gln Glu Arg
            245   250   255

Tyr Ser Glu Lys Asp Asp Glu Arg Lys Gly Ala Asn Leu Leu Leu Ser
            260   265   270

Ala Ser Pro Asp Phe Gly Asp Ile Ala Val Ser His Val Gly Ala Val
        275   280   285

1501

```
Val Pro Thr His Gly Phe Ser Ser Phe Lys Phe Ile Pro Asn Thr Asp
    290             295             300
```

```
Asp Gln Ile Ile Val Ala Leu Lys Ser Glu Glu Asp Ser Gly Arg Val
305             310             315             320
```

```
Ala Ser Tyr Ile Met Ala Phe Thr Leu Asp Gly Arg Phe Leu Leu Pro
            325             330             335
```

```
Glu Thr Lys Ile Gly Ser Val Lys Tyr Glu Gly Ile Glu Phe Ile
            340             345             350
```

<210> 1427
<211> 510
<212> PRT
<213> Homo sapiens

<400> 1427
```
Glu Arg Ser Trp Phe Ala Gln Val Arg Arg Leu Gly Pro His Gly Ala
1               5               10              15
```

```
Val Ala Arg Leu Arg Val Arg Gly Leu Pro Gly Ala Gly Arg Gly Leu
            20              25              30
```

```
Arg Leu Pro Ala Gly Ala Arg Ala Ala Arg Leu Gly Ala Ala Leu Ser
            35              40              45
```

```
Leu Glu Leu Ala Val Ser Gly Ala Arg Ala Cys Ala Pro Gly Thr Arg
    50              55              60
```

```
Leu Pro Arg Gly Pro Val Gly Gly Ser Trp Asp Ala Leu Ile Val Arg
65              70              75              80
```

```
Pro Val Arg Arg Trp Arg Arg Val Ala Val Gly Val Asn Ala Cys Val
            85              90              95
```

```
Asp Val Val Leu Ser Gly Val Lys Leu Leu Gln Ala Leu Gly Leu Ser
            100             105             110
```

```
Pro Gly Asn Gly Lys Asp His Ser Ile Leu His Ser Arg Asn Asp Leu
            115             120             125
```

```
Glu Glu Ala Phe Ile His Phe Met Gly Lys Gly Ala Ala Ala Glu Arg
    130             135             140
```

```
Phe Phe Ser Asp Lys Glu Thr Phe His Asp Ile Ala Gln Val Ala Ser
145             150             155             160
```

Glu Phe Pro Gly Ala Gln His Tyr Val Gly Gly Asn Ala Ala Leu Ile
            165   170   175

Gly Gln Lys Phe Ala Ala Asn Ser Asp Leu Lys Val Leu Leu Cys Gly
            180   185   190

Pro Val Gly Pro Lys Leu His Glu Leu Leu Asp Asp Asn Val Phe Val
            195   200   205

Pro Pro Glu Ser Leu Gln Glu Val Asp Glu Phe His Leu Ile Leu Glu
    210   215   220

Tyr Gln Ala Gly Glu Glu Trp Gly Gln Leu Lys Ala Pro His Ala Asn
225   230   235   240

Arg Phe Ile Phe Ser His Asp Leu Ser Asn Gly Ala Met Asn Met Leu
            245   250   255

Glu Val Phe Val Ser Ser Leu Glu Glu Phe Gln Pro Asp Leu Val Val
            260   265   270

Leu Ser Gly Leu His Met Met Glu Gly Gln Ser Lys Glu Leu Gln Arg
            275   280   285

Lys Arg Leu Leu Glu Val Val Thr Ser Ile Ser Asp Ile Pro Thr Gly
    290   295   300

Ile Pro Val His Leu Glu Leu Ala Ser Met Thr Asn Arg Glu Leu Met
305   310   315   320

Ser Ser Ile Val His Gln Gln Val Phe Pro Ala Val Thr Ser Leu Gly
            325   330   335

Leu Asn Glu Gln Glu Leu Leu Phe Leu Thr Gln Ser Ala Ser Gly Pro
            340   345   350

His Ser Ser Leu Ser Ser Trp Asn Gly Val Pro Asp Val Gly Met Val
            355   360   365

Ser Asp Ile Leu Phe Trp Ile Leu Lys Glu His Gly Arg Ser Lys Ser
    370   375   380

Arg Ala Ser Asp Leu Thr Arg Ile His Phe His Thr Leu Val Tyr His
385   390   395   400

Ile Leu Ala Thr Val Asp Gly His Trp Ala Asn Gln Leu Ala Ala Val
            405   410   415

Ala Ala Gly Ala Arg Val Ala Gly Thr Gln Ala Cys Ala Thr Glu Thr
            420   425   430

1503

```
Ile Asp Thr Ser Arg Val Ser Leu Arg Ala Pro Gln Glu Phe Met Thr
        435             440             445

Ser His Ser Glu Ala Gly Ser Arg Ile Val Leu Asn Pro Asn Lys Pro
        450             455             460

Val Val Glu Trp His Arg Glu Gly Ile Ser Phe His Phe Thr Pro Val
465             470             475             480

Leu Val Cys Lys Asp Pro Ile Arg Thr Val Gly Leu Gly Asp Ala Ile
            485             490             495

Ser Ala Glu Gly Leu Phe Tyr Ser Glu Val His Pro His Tyr
        500             505             510
```

```
<210> 1428
<211> 316
<212> PRT
<213> Homo sapiens

<400> 1428
Pro Pro Leu Pro Pro Arg Ser Phe Pro Asn Leu Phe Ser Arg Pro Glu
 1           5               10              15

Pro Leu Pro Glu Pro Gly Arg Arg Gly Cys Asn Arg Ser Arg Glu Pro
            20              25              30

Ala Ala Arg Ala Pro Ser Pro Pro Pro Phe Glu Gly Ala Pro Gly
        35              40              45

Arg Ala Met Val Lys Val Thr Phe Asn Ser Ala Leu Ala Gln Lys Glu
        50              55              60

Ala Lys Lys Asp Glu Pro Lys Ser Gly Glu Glu Ala Leu Ile Ile Pro
65              70              75              80

Pro Asp Ala Val Ala Val Asp Cys Lys Asp Pro Asp Asp Val Val Pro
            85              90              95

Val Gly Gln Arg Arg Ala Trp Cys Trp Cys Met Cys Phe Gly Leu Ala
            100             105             110

Phe Met Leu Ala Gly Val Ile Leu Gly Gly Ala Tyr Leu Tyr Lys Tyr
        115             120             125

Phe Ala Leu Gln Pro Asp Asp Val Tyr Tyr Cys Gly Ile Lys Tyr Ile
        130             135             140

Lys Asp Asp Val Ile Leu Asn Glu Pr  Ser Ala Asp Ala Pro Ala Ala
```

1504

```
145                 150                 155                 160

Leu Tyr Gln Thr Ile Glu Glu Asn Ile Lys Ile Phe Glu Glu Glu Glu
            165                 170                 175

Val Glu Phe Ile Ser Val Pro Val Pro Glu Phe Ala Asp Ser Asp Pro
            180                 185                 190

Ala Asn Ile Val His Asp Phe Asn Lys Lys Leu Thr Ala Tyr Leu Asp
            195                 200                 205

Leu Asn Leu Asp Lys Cys Tyr Val Ile Pro Leu Asn Thr Ser Ile Val
    210                 215                 220

Met Pro Pro Arg Asn Leu Leu Glu Leu Leu Ile Asn Ile Lys Ala Gly
225                 230                 235                 240

Thr Tyr Leu Pro Gln Ser Tyr Leu Ile His Glu His Met Val Ile Thr
                245                 250                 255

Asp Arg Ile Glu Asn Ile Asp His Leu Gly Phe Phe Ile Tyr Arg Leu
            260                 265                 270

Cys His Asp Lys Glu Thr Tyr Lys Leu Gln Arg Arg Glu Thr Ile Lys
            275                 280                 285

Gly Ile Gln Lys Arg Glu Ala Ser Asn Cys Phe Ala Ile Arg His Phe
    290                 295                 300

Glu Asn Lys Phe Ala Val Glu Thr Leu Ile Cys Ser
305                 310                 315
```

```
<210> 1429
<211> 398
<212> PRT
<213> Homo sapiens

<400> 1429
His Thr Arg Val Asp Phe Asn Val Pro Met Lys Asn Asn Gln Ile Thr
 1               5                  10                  15

Asn Asn Gln Arg Ile Lys Ala Ala Val Pro Ser Ile Lys Phe Cys Leu
            20                  25                  30

Asp Asn Gly Ala Lys Ser Val Val Leu Met Ser His Leu Gly Arg Pro
            35                  40                  45

Asp Gly Val Pro Met Pro Asp Lys Tyr Ser Leu Glu Pro Val Ala Val
    50                  55                  60
```

1505

```
Glu Leu Lys Ser Leu Leu Gly Lys Asp Val Leu Phe Leu Lys Asp Cys
65              70              75              80

Val Gly Pro Glu Val Glu Lys Ala Cys Ala Asn Pro Ala Ala Gly Ser
            85              90              95

Val Ile Leu Leu Glu Asn Leu Arg Phe His Val Glu Glu Glu Gly Lys
        100             105             110

Gly Lys Asp Ala Ser Gly Asn Lys Val Lys Ala Glu Pro Ala Lys Ile
        115             120             125

Glu Ala Phe Arg Ala Ser Leu Ser Lys Leu Gly Asp Val Tyr Val Asn
    130             135             140

Asp Ala Phe Gly Thr Ala His Arg Ala His Ser Ser Met Val Gly Val
145             150             155             160

Asn Leu Pro Gln Lys Ala Gly Gly Phe Leu Met Lys Lys Glu Leu Asn
            165             170             175

Tyr Phe Ala Lys Ala Leu Glu Ser Pro Glu Arg Pro Phe Leu Ala Ile
            180             185             190

Leu Gly Gly Ala Lys Val Ala Asp Lys Ile Gln Leu Ile Asn Asn Met
        195             200             205

Leu Asp Lys Val Asn Glu Met Ile Ile Gly Gly Gly Met Ala Phe Thr
    210             215             220

Phe Leu Lys Val Leu Asn Asn Met Glu Ile Gly Thr Ser Leu Phe Asp
225             230             235             240

Glu Glu Gly Ala Lys Ile Val Lys Asp Leu Met Ser Lys Ala Glu Lys
            245             250             255

Asn Gly Val Lys Ile Thr Leu Pro Val Asp Phe Val Thr Ala Asp Lys
            260             265             270

Phe Asp Glu Asn Ala Lys Thr Gly Gln Ala Thr Val Ala Ser Gly Ile
    275             280             285

Pro Ala Gly Trp Met Gly Leu Asp Cys Gly Pro Glu Ser Ser Lys Lys
    290             295             300

Tyr Ala Glu Ala Val Thr Arg Ala Lys Gln Ile Val Trp Asn Gly Pro
305             310             315             320

Val Gly Val Phe Glu Trp Glu Ala Phe Ala Arg Gly Thr Lys Ala Leu
            325             330             335
```

```
Met Asp Glu Val Val Lys Ala Thr Ser Arg Gly Cys Ile Thr Ile Ile
        340             345             350

Gly Gly Gly Asp Thr Ala Thr Cys Cys Ala Lys Trp Asn Thr Glu Asp
        355             360             365

Lys Val Ser His Val Ser Thr Gly Gly Gly Ala Ser Leu Glu Leu Leu
    370             375             380

Glu Gly Lys Val Leu Pro Gly Val Asp Ala Leu Ser Asn Ile
385             390             395
```

<210> 1430
<211> 249
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (245)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1430
```
Pro Ala Met Gly Ala Ala Val Phe Phe Gly Cys Thr Phe Val Ala Phe
 1           5             10             15

Gly Pro Ala Phe Ala Leu Phe Leu Ile Thr Val Ala Gly Asp Pro Leu
            20             25             30

Arg Val Ile Ile Leu Val Ala Gly Ala Phe Phe Trp Leu Val Ser Leu
        35             40             45

Leu Leu Ala Ser Val Val Trp Phe Ile Leu Val His Val Thr Asp Arg
    50             55             60

Ser Asp Ala Arg Leu Gln Tyr Gly Leu Leu Ile Phe Gly Ala Ala Val
65             70             75             80

Ser Val Leu Leu Gln Glu Val Phe Arg Phe Ala Tyr Tyr Lys Leu Leu
            85             90             95

Lys Lys Ala Asp Glu Gly Leu Ala Ser Leu Ser Glu Asp Gly Arg Ser
            100             105             110

Pro Ile Ser Ile Arg Gln Met Ala Tyr Val Ser Gly Leu Ser Phe Gly
        115             120             125

Ile Ile Ser Gly Val Phe Ser Val Ile Asn Ile Leu Ala Asp Ala Leu
```

1507

```
              130                 135                 140

Gly Pro Gly Val Val Gly Ile His Gly Asp Ser Pro Tyr Tyr Phe Leu
145                 150                 155                 160

Thr Ser Ala Phe Leu Thr Ala Ala Ile Ile Leu Leu His Thr Phe Trp
                165                 170                 175

Gly Val Val Phe Phe Asp Ala Cys Glu Arg Arg Arg Tyr Trp Ala Leu
                180                 185                 190

Gly Leu Val Val Gly Ser His Leu Leu Thr Ser Gly Leu Thr Phe Leu
                195                 200                 205

Asn Pro Trp Tyr Glu Ala Ser Leu Leu Pro Ile Tyr Ala Val Thr Val
                210                 215                 220

Ser Met Gly Leu Trp Ala Phe Ile Thr Ala Gly Gly Ser Leu Arg Ser
225                 230                 235                 240

Ile Gln Arg Ser Xaa Leu Cys Lys Asp
                245
```

<210> 1431
<211> 271
<212> PRT
<213> Homo sapiens

<400> 1431

```
Arg Pro Thr Arg Pro Val Met Ala Pro Arg Ser Leu Leu Leu Leu Leu
  1               5                 10                  15

Ser Gly Ala Leu Ala Leu Thr Asp Thr Trp Ala Gly Ser His Ser Leu
                20                  25                  30

Arg Tyr Phe Ser Thr Ala Val Ser Arg Pro Gly Arg Gly Glu Pro Arg
                35                  40                  45

Tyr Ile Ala Val Glu Tyr Val Asp Asp Thr Gln Phe Leu Arg Phe Asp
    50                  55                  60

Ser Asp Ala Ala Ile Pro Arg Met Glu Pro Arg Glu Pro Trp Val Glu
 65                  70                  75                  80

Gln Glu Gly Pro Gln Tyr Trp Glu Trp Thr Thr Gly Tyr Ala Lys Ala
                85                  90                  95

Asn Ala Gln Thr Asp Arg Val Ala Leu Arg Asn Leu Leu Arg Arg Tyr
                100                 105                 110
```

1508

```
Asn Gln Ser Glu Ala Gly Ser His Thr Leu Gln Gly Met Asn Gly Cys
        115                 120                 125

Asp Met Gly Pro Asp Gly Arg Leu Leu Arg Gly Tyr His Gln His Ala
        130                 135                 140

Tyr Asp Gly Lys Asp Tyr Ile Ser Leu Asn Glu Asp Leu Arg Ser Trp
145                 150                 155                 160

Thr Ala Ala Asp Thr Val Ala Gln Ile Thr Gln Arg Phe Tyr Glu Ala
                165                 170                 175

Glu Glu Tyr Ala Glu Glu Phe Arg Thr Tyr Leu Glu Gly Glu Cys Leu
            180                 185                 190

Glu Leu Leu Arg Arg Tyr Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg
        195                 200                 205

Ala Asp Pro Pro Lys Ala His Val Ala His His Pro Ile Ser Asp His
    210                 215                 220

Glu Ala Thr Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile
225                 230                 235                 240

Thr Leu Thr Trp Gln Arg Asp Gly Glu Glu Gln Thr Gln Asp Thr Glu
                245                 250                 255

Leu Val Glu Thr Arg Pro Ala Gly Asp Gly Thr Phe Arg Ser Gly
            260                 265                 270
```

```
<210> 1432
<211> 455
<212> PRT
<213> Homo sapiens

<400> 1432
Ala His Ala Ser Gly Ala Pro Glu Gln Arg Pro Arg Pro Pro Arg Leu
 1               5               10                  15

Leu Arg Arg Asp Leu Glu Arg Lys Thr Pro Ala Arg Arg Pro Ala Leu
            20              25                  30

Ala Ser Leu Pro Thr Gly His Thr Ala Pro Pro Pro Arg Pro Arg Cys
        35              40                  45

Ala Arg Pro Val Arg Cys Thr Pro Ala Cys Trp Arg Leu Arg Arg Arg
    50              55                  60
```

1509

```
Ala Arg Pro Gly Leu Leu Leu Arg Ala Thr Met Ser Ser Arg Ile Ala
65            70            75            80

Arg Ala Leu Ala Leu Val Val Thr Leu Leu His Leu Thr Arg Leu Ala
        85            90            95

Leu Ser Thr Cys Pro Ala Ala Cys His Cys Pro Leu Glu Ala Pro Lys
            100           105           110

Cys Ala Pro Gly Val Gly Leu Val Arg Asp Gly Cys Gly Cys Cys Lys
        115           120           125

Val Cys Ala Lys Gln Leu Asn Glu Asp Cys Ser Lys Thr Gln Pro Cys
    130           135           140

Asp His Thr Lys Gly Leu Glu Cys Asn Phe Gly Ala Ser Ser Thr Ala
145           150           155           160

Leu Lys Gly Ile Cys Arg Ala Gln Ser Glu Gly Arg Pro Cys Glu Tyr
            165           170           175

Asn Ser Arg Ile Tyr Gln Asn Gly Glu Ser Phe Gln Pro Asn Cys Lys
        180           185           190

His Gln Cys Thr Cys Ile Asp Gly Ala Val Gly Cys Ile Pro Leu Cys
        195           200           205

Pro Gln Glu Leu Ser Leu Pro Asn Leu Gly Cys Pro Asn Pro Arg Leu
    210           215           220

Val Lys Val Thr Gly Gln Cys Cys Glu Glu Trp Val Cys Asp Glu Asp
225           230           235           240

Ser Ile Lys Asp Pro Met Glu Asp Gln Asp Gly Leu Leu Gly Lys Glu
            245           250           255

Leu Gly Phe Asp Ala Ser Glu Val Glu Leu Thr Arg Asn Asn Glu Leu
            260           265           270

Ile Ala Val Gly Lys Gly Ser Ser Leu Lys Arg Leu Pro Val Phe Gly
        275           280           285

Met Glu Pro Arg Ile Leu Tyr Asn Pro Leu Gln Gly Gln Lys Cys Ile
    290           295           300

Val Gln Thr Thr Ser Trp Ser Gln Cys Ser Lys Thr Cys Gly Thr Gly
305           310           315           320

Ile Ser Thr Arg Val Thr Asn Asp Asn Pro Glu Cys Arg Leu Val Lys
            325           330           335
```

```
Glu Thr Arg Ile Cys Glu Val Arg Pro Cys Gly Gln Pro Val Tyr Ser
            340             345             350

Ser Leu Lys Lys Gly Lys Lys Cys Ser Lys Thr Lys Lys Ser Pro Glu
            355             360             365

Pro Val Arg Phe Thr Tyr Ala Gly Cys Leu Ser Val Lys Lys Tyr Arg
    370             375             380

Pro Lys Tyr Cys Gly Ser Cys Val Asp Gly Arg Cys Cys Thr Pro Gln
385             390             395             400

Leu Thr Arg Thr Val Lys Met Arg Phe Arg Cys Glu Asp Gly Glu Thr
            405             410             415

Phe Ser Lys Asn Val Met Met Ile Gln Ser Cys Lys Cys Asn Tyr Asn
            420             425             430

Cys Pro His Ala Asn Glu Ala Ala Phe Pro Phe Tyr Arg Leu Phe Asn
        435             440             445

Asp Ile His Lys Phe Arg Asp
    450             455
```

<210> 1433
<211> 87
<212> PRT
<213> Homo sapiens

<400> 1433
```
Thr Glu Gly Glu Thr Trp Arg Ser Asp Ser Glu Val Arg Leu Gln Leu
  1             5             10             15

Ala His His Leu Arg Pro Gly Pro Asp Glu Pro Pro Val Ala Ser Ala
            20             25             30

Gly Ala Ala Ala Ala Ser Arg Gly Ala Cys Gly Pro Ser His Ser Arg
        35             40             45

His Cys Leu Pro Ala Gly Leu Glu Pro Ser Glu Arg Pro Asn Pro Arg
    50             55             60

Pro Gly Arg Asp Leu Arg Gly Met Thr Ala Glu Pro Pro Lys Gly Gly
65             70             75             80

Glu Phe Glu Gly Arg Gly Pro
            85
```

1511

<210> 1434
<211> 110
<212> PRT
<213> Homo sapiens

<400> 1434
Val Trp Arg Ala Gly Ala Gly Met Ala Ser Leu Arg Ser Gln His Gly
 1   5   10   15

Pro Gly Ala Pro Glu Ser Leu Arg Lys Val Leu Met Pro Ser Ser Met
                20   25   30

Gly Leu Leu Leu Ile Leu Tyr Ala Arg Leu Pro Pro Ser Leu Val Gly
            35   40   45

Gln Ala Gly Arg Trp Ile Gly Trp Ala Gly Arg Ala Gly Gly Gln Ala
        50   55   60

Val Arg Gln Pro Ser Pro Thr Val Leu Ile Asp Gly Val Glu Cys Ser
65   70   75   80

Asp Val Lys Phe Phe Gln Leu Ala Ala Gln Trp Ser Ser His Val Lys
                85   90   95

His Phe Pro Ile Cys Ile Phe Gly His Ser Lys Ala Thr Phe
                100   105   110

<210> 1435
<211> 103
<212> PRT
<213> Homo sapiens

<400> 1435
Gly Ser Gln Asp Ala Arg Arg Gly Ser Gly Leu Gly Val Ser Ser Phe
 1   5   10   15

Leu Arg Gly Ser Gly Gly Ser Gly Pro Leu Trp Val Gln His Gly Lys
                20   25   30

Arg Gly Arg Tyr Phe Ser Ser Trp Ala Phe Ile Lys Glu Lys Thr Met
            35   40   45

Leu Ala Gly Arg Gly Gly Ser Arg Leu Gln Ser Gln His Phe Gly Arg
        50   55   60

Pro Arg Arg Val Asp His Leu Arg Ser Gly Val Gln Asp Gln Pro Gly
65   70   75   80

1512

Gln His Gly Glu Thr Pro Ser Leu Leu Lys Asn Thr Lys Ile Ser Gln
                85   90   95

Val Trp Trp Leu Thr Leu Met
              100

<210> 1436
<211> 413
<212> PRT
<213> Homo sapiens

<400> 1436
Asn Glu Cys Thr Gly Pro Glu Phe Arg Val Asp Pro Arg Val Ala Ser
 1   5   10   15

Ala Pro Arg Ala Gln Ser Leu Ala Phe Ala Asp Pro Pro Val His
            20   25   30

Thr Arg Arg Gln Leu Thr Met Asp Asp Asp Ile Ala Ala Leu Val Val
        35   40   45

Asp Asn Gly Ser Gly Met Cys Lys Ala Gly Phe Ala Gly Asp Asp Ala
    50   55   60

Pro Arg Ala Val Phe Pro Ser Ile Val Gly Arg Pro Arg His Gln Gly
65   70   75   80

Val Met Val Gly Met Gly Gln Lys Asp Ser Tyr Val Gly Asp Glu Ala
                85   90   95

Gln Ser Lys Arg Gly Ile Leu Thr Leu Lys Tyr Pro Ile Glu His Gly
            100   105   110

Ile Val Thr Asn Trp Asp Asp Met Glu Lys Ile Trp His His Thr Phe
            115   120   125

Tyr Asn Glu Leu Arg Val Ala Pro Glu Glu His Pro Val Leu Leu Thr
    130   135   140

Glu Ala Pro Leu Asn Pro Lys Ala Asn Arg Glu Lys Met Thr Gln Ile
145   150   155   160

Met Phe Glu Thr Phe Asn Thr Pro Ala Met Tyr Val Ala Ile Gln Ala
                165   170   175

Val Leu Ser Leu Tyr Ala Ser Gly Arg Thr Thr Gly Ile Val Met Asp
            180   185   190

Ser Gly Asp Gly Val Thr His Thr Val Pro Ile Tyr Glu Gly Tyr Ala

1513

```
                195                     200                     205

    Leu Pro His Ala Ile Leu Arg Leu Asp Leu Ala Gly Arg Asp Leu Thr
        210                 215                 220

    Asp Tyr Leu Met Lys Ile Leu Thr Glu Arg Gly Tyr Ser Phe Thr Thr
    225                 230                 235                 240

    Thr Ala Glu Arg Glu Ile Val Arg Asp Ile Lys Glu Lys Leu Cys Tyr
                    245                 250                 255

    Val Ala Leu Asp Phe Glu Gln Glu Met Ala Thr Ala Ala Ser Ser Ser
                    260                 265                 270

    Ser Leu Glu Lys Ser Tyr Glu Leu Pro Asp Gly Gln Val Ile Thr Ile
            275                 280                 285

    Gly Asn Glu Arg Phe Arg Cys Pro Glu Ala Leu Phe Gln Pro Ser Phe
        290                 295                 300

    Leu Gly Met Glu Ser Cys Gly Ile His Glu Thr Thr Phe Asn Ser Ile
    305                 310                 315                 320

    Met Lys Cys Asp Val Asp Ile Arg Lys Asp Leu Tyr Ala Asn Thr Val
                    325                 330                 335

    Leu Ser Gly Gly Thr Thr Met Tyr Pro Gly Ile Ala Asp Arg Met Gln
                340                 345                 350

    Lys Glu Ile Thr Ala Leu Ala Pro Ser Thr Met Lys Ile Lys Ile Ile
            355                 360                 365

    Ala Pro Pro Glu Arg Lys Tyr Ser Val Trp Ile Gly Gly Ser Ile Leu
        370                 375                 380

    Ala Ser Leu Ser Thr Phe Gln Gln Met Trp Ile Ser Lys Gln Glu Tyr
    385                 390                 395                 400

    Asp Glu Ser Gly Pro Ser Ile Val His Arg Lys Cys Phe
                    405                 410
```

<210> 1437
<211> 97
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (28)

1514

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1437
Val Val Pro Ser Thr Lys Asp Phe Leu Val Gly Val Lys Gly Ser Gly
 1   5   10   15

Gly His Arg Gly Gly Gly Glu Met Ala Phe Ser Xaa Ser Gln Ala Pro
            20   25   30

Tyr Leu Ser Pro Ala Val Pro Phe Ser Gly Thr Ile Gln Gly Gly Leu
        35   40   45

Gln Asp Gly Leu Gln Ile Thr Val Asn Gly Thr Val Leu Ser Ser Ser
    50   55   60

Gly Thr Ser Gly Asn Asp Ile Ala Phe His Phe Asn Pro Arg Phe Glu
65   70   75   80

Asp Gly Gly Tyr Val Val Cys Thr Ala Gly Arg Thr Glu Ala Gly Gly
            85   90   95

Pro

<210> 1438
<211> 153
<212> PRT
<213> Homo sapiens

<400> 1438
Leu Ala Pro Leu Arg Cys Gln Pro Gly Thr Arg Thr Gln Pro Arg Ser
 1   5   10   15

His Pro Ala Ala Asn Asp Pro Ser Ala Ala Met Ser Ala Ala Gly Ala
            20   25   30

Arg Gly Leu Arg Ala Thr Tyr His Arg Leu Leu Asp Lys Val Glu Leu
        35   40   45

Met Leu Pro Glu Lys Leu Arg Pro Leu Tyr Asn His Pro Ala Gly Pro
    50   55   60

Arg Thr Val Phe Phe Trp Ala Pro Ile Met Lys Trp Gly Leu Val Cys
65   70   75   80

Ala Gly Leu Ala Asp Met Ala Arg Pro Ala Glu Lys Leu Ser Thr Ala
            85   90   95

Gln Ser Ala Val Leu Met Ala Thr Gly Phe Ile Trp S r Arg Tyr Ser

```
               100                    105                    110

Leu Val Ile Ile Pro Lys Asn Trp Ser Leu Phe Ala Val Asn Phe Phe
        115                    120                    125

Val Gly Ala Ala Gly Ala Ser Gln Leu Phe Arg Ile Trp Arg Tyr Asn
        130                    135                    140

Gln Glu Leu Lys Ala Lys Ala His Lys
145                    150
```

```
<210> 1439
<211> 343
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (244)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (305)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (325)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (328)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (340)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1439
Trp Ile Gln Arg Ile Arg Ala Arg Gly Lys Thr Asn Leu Arg Arg Thr
 1               5                   10                   15

Thr Tyr Leu Val Leu Asp Glu Ala Asp Arg Met Leu Asp Met Gly Phe
            20                   25                   30

Glu Pro Gln Ile Arg Lys Ile Val Asp Gln Il  Arg Pro Asp Arg Gln
```

1516

```
              35                    40                    45
  Thr Leu Met Trp Ser Ala Thr Trp Pro Lys Glu Val Arg Gln Leu Ala
      50                  55                  60

  Glu Asp Phe Leu Lys Asp Tyr Ile His Ile Asn Ile Gly Ala Leu Glu
  65                  70                  75                  80

  Leu Ser Ala Asn His Asn Ile Leu Gln Ile Val Asp Val Cys His Asp
                  85                  90                  95

  Val Glu Lys Asp Glu Lys Leu Ile Arg Leu Met Glu Glu Ile Met Ser
                  100                 105                 110

  Glu Lys Glu Asn Lys Thr Ile Val Phe Val Glu Thr Lys Arg Arg Cys
              115                 120                 125

  Asp Glu Leu Thr Arg Lys Met Arg Arg Asp Gly Trp Pro Ala Met Gly
      130                 135                 140

  Ile His Gly Asp Lys Ser Gln Gln Glu Arg Asp Trp Val Leu Asn Glu
  145                 150                 155                 160

  Phe Lys His Gly Lys Ala Pro Ile Leu Ile Ala Thr Asp Val Ala Ser
                  165                 170                 175

  Arg Gly Leu Asp Val Glu Asp Val Lys Phe Val Ile Asn Tyr Asp Tyr
                  180                 185                 190

  Pro Asn Ser Ser Glu Asp Tyr Ile His Arg Ile Gly Arg Thr Ala Arg
              195                 200                 205

  Ser Thr Lys Thr Gly Thr Ala Tyr Thr Phe Phe Thr Pro Asn Asn Ile
      210                 215                 220

  Lys Gln Val Ser Asp Leu Ile Ser Val Leu Arg Glu Ala Asn Gln Ala
  225                 230                 235                 240

  Ile Asn Pro Xaa Leu Leu Gln Leu Val Glu Asp Arg Gly Ser Gly Arg
                  245                 250                 255

  Ser Arg Gly Arg Gly Gly Met Lys Asp Asp Arg Arg Asp Arg Tyr Ser
                  260                 265                 270

  Ala Gly Lys Arg Gly Gly Phe Asn Thr Phe Arg Asp Arg Glu Asn Tyr
                  275                 280                 285

  Asp Arg Gly Tyr Ser Ser Leu Leu Lys Arg Asp Phe Gly Ala Lys Thr
      290                 295                 300

  Xaa Asn Gly Gly Tyr Ser Ala Cys Lys Phe Thr Asn Gly Ser Phe Gly
```

```
       305                    310                    315                    320
```

Ser Asn Phe Gly Xaa Cys Trp Xaa Ser Gly Pro Val Leu Gly Leu Gly
                325   330   335

Ile Pro Thr Xaa Ala Leu Pro
            340

<210> 1440
<211> 122
<212> PRT
<213> Homo sapiens

<400> 1440
Ile Cys Val Ser Ala Arg Arg Ala Leu Ser Gly Leu Glu His Gly Leu
 1   5   10   15

Gly Trp Glu Arg Val Trp Glu Lys Met Gly Asn Lys Glu Pro Gly Ser
            20   25   30

His Gly His Arg Ser Asp Ala Asp Pro Ser Arg Phe Ser Pro Val Leu
            35   40   45

Pro Pro Ala Val Gln Leu Gly Val Trp Arg Glu Glu Gly Arg Gly Gly
     50   55   60

Ser Cys Pro Phe Ser Trp Gly Arg Gly Pro Val Ser Ser Thr Trp Leu
 65   70   75   80

Phe Pro Lys Gly Ser Lys Arg Glu Gly Leu Gly Glu Lys Thr Met Glu
                85   90   95

Arg Gly Pro Ala Lys Glu Asn Arg Glu Glu Val Ser Gly Leu Ile Ser
            100   105   110

Leu Leu Ser Arg Cys Ser Gly Ser Leu Ile
         115   120

<210> 1441
<211> 74
<212> PRT
<213> Homo sapiens

<400> 1441
Gly His Arg His Thr Pro Pro His Leu Ala Asn Phe Tyr Tyr Phe Phe
 1   5   10   15

```
Cys Arg Asp Glu Val Ser Leu Cys Pro Gly Trp Ser Gln Thr Pro Val
            20                  25                  30

Leu Lys Gln Ser Ser His Leu Gly Ser Leu Ser Ala Gly Ile Ile Gly
            35                  40                  45

Met Ser His Arg Ala Arg Pro His Val Cys Met Leu Lys Val Leu Arg
            50                  55                  60

Ile Pro Met Glu Asn Lys Phe Asp Phe Ala
 65                  70
```

<210> 1442
<211> 103
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1442
```
Ala Xaa Xaa His Gln Pro Ser Leu Lys Gly Thr Lys Ala Gly Ala Pro
 1               5                  10                  15

Pro Arg Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu
            20                  25                  30

Phe Gly Thr Arg Glu Ala Glu Ala Gly Val Gln Trp Cys Asp Leu Gly
            35                  40                  45

Ser Leu Gln Pro Leu Pro Pro Arg Phe Gln Gln Phe Ser Cys Leu Ser
            50                  55                  60

Leu Pro Ser Gly Trp Asp Asp Arg Arg Leu Pro Ser Cys Leu Thr Ser
 65                  70                  75                  80

Phe Cys Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Trp Pro Gly Trp
                 85                  90                  95

Ser Gln Thr Pro Asp Leu Arg
                100
```

```
<210> 1443
<211> 106
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1443
Leu His Ala Ala Ala Cys Ala Ala Ala Met Ser Leu Val Ile Pro Glu
 1               5                  10                  15

Lys Phe Gln His Ile Leu Arg Val Leu Asn Thr Asn Ile Asp Gly Arg
            20                  25                  30

Arg Lys Ile Ala Phe Ala Ile Thr Ala Ile Lys Gly Val Gly Arg Xaa
        35                  40                  45

Tyr Ala His Val Xaa Leu Arg Lys Xaa Xaa Ile Asp Leu Thr Xaa Arg
    50                  55                  60

Ala Xaa Glu Leu Thr Xaa Asp Xaa Val Glu Arg Val Ile Thr Ile Met
65                  70                  75                  80

Gln Asn Xaa Arg Gln Tyr Lys Ile Pro Asp Trp Phe Leu Asn Arg Gln
                85                  90                  95

Asn Asp Xaa Xaa Asp Xaa Ser Thr Ser Ser
            100             105


<210> 1444
<211> 14
<212> PRT
<213> Homo sapiens

<400> 1444
Pro Val Trp Pro Lys Trp Ser Gly Trp Pro Leu Ala Leu Pro
 1               5                  10
```

```
<210> 1445
<211> 126
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1445
Phe Leu Arg Leu Val Leu Gly Leu Leu Ile Gly Arg Cys Leu Gln Glu
 1               5                  10                  15

Met Leu Lys Leu Gly Thr Leu Pro Pro Thr Ser Lys Pro Gln Leu Leu
            20                  25                  30

Cys Gln Met Val Ser Leu Lys Ile Ser Ala Cys Leu Thr Thr Lys Gly
         35                  40                  45

Lys Tyr Val Val Phe Phe Phe Tyr Pro Leu Asp Phe Thr Phe Val Cys
       50                  55                  60

Pro Thr Glu Ile Ile Ala Phe Ser Asp Arg Ala Glu Glu Phe Lys Lys
 65                  70                  75                  80

Leu Asn Cys Gln Val Ile Gly Ala Ser Val Asp Ser His Phe Cys His
               85                  90                  95

Leu Ala Trp Val Asn Thr Pro Xaa Lys Gln Gly Gly Leu Gly Pro Met
              100                 105                 110

Asn Ile Pro Leu Val Ser Xaa Pro Thr His Xaa Xaa Ser Gly
          115                 120                 125
```

1522

```
<210> 1446
<211> 97
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1446
Cys Asp Lys Glu Lys Asn Leu Leu His Val Thr Asp Thr Gly Val Gly
 1               5                  10                  15


Met Thr Arg Glu Glu Leu Val Lys Asn Leu Gly Thr Ile Ala Lys Ser
            20                  25                  30


Gly Thr Ser Glu Phe Leu Asn Lys Met Thr Glu Ala Gln Glu Asp Gly
            35                  40                  45


Gln Ser Thr Ser Asp Leu Ile Gly Gln Phe Gly Val Gly Phe Tyr Ser
        50                  55                  60


Ala Phe Leu Val Ala Asp Lys Val Ile Val Thr Ser Lys His Asn Asn
 65                  70                  75                  80


Asp Thr Gln His Ile Trp Glu Ser Asp Ser Asn Xaa Phe Ser Val Asn
                85                  90                  95


Cys
```

```
<210> 1447
<211> 47
<212> PRT
<213> Homo sapiens

<400> 1447
His Ser Arg His Arg Gly Val Phe Leu Thr Pro Leu Leu Ala Met Ser
 1               5                  10                  15


Ser His Lys Thr Phe Arg Ile Lys Arg Phe Leu Ala Lys Lys Gln Lys
            20                  25                  30


Gln Asn Arg Pro Ile Pro Gln Trp Ile Arg Met Lys Thr Gly Lys
            35                  40                  45
```

```
<210> 1448
<211> 106
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1448
Val Phe Arg Val Glu Ala Trp Arg Thr Ser Gly Glu Thr Pro Ala Ile
 1               5                   10                  15

Ser Pro Ser Lys Arg Ala Arg Pro Ala Glu Val Gly Gly Met Gln Leu
                20                  25                  30

Arg Phe Ala Arg Leu Ser Glu His Ala Thr Ala Pro Thr Arg Gly Ser
            35                  40                  45

Ala Arg Ala Ala Gly Tyr Asp Leu Tyr Ser Ala Tyr Asp Tyr Thr Ile
        50                  55                  60

Pro Pro Met Glu Lys Ala Val Val Lys Thr Asp Ile Gln Ile Ala Leu
 65                  70                  75                  80

Pro Ser Gly Cys Xaa Gly Arg Val Ala Pro Arg Ser Gly Leu Ala Ala
                85                  90                  95

Lys His Phe Ile Asp Val Gly Xaa Val Ser
                100                 105


<210> 1449
<211> 60
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

1524

<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1449
Thr Met Ala Val Gly Lys Asn Lys Arg Leu Thr Lys Gly Gly Lys Lys
 1   5   10   15

Gly Ala Lys Lys Lys Val Val Asp Pro Phe Phe Lys Lys Asp Trp Tyr
            20   25   30

Asp Val Lys Ala Pro Ala Met Phe Xaa Ile Arg Xaa Ile Gly Lys Thr
            35   40   45

Leu Val Thr Arg Thr Gln Gly Thr Lys Ile Ala Ser
        50   55   60

<210> 1450
<211> 45
<212> PRT
<213> Homo sapiens

<400> 1450
Asn Phe Gly Ser Leu Leu Gly Ala Cys Leu Ile Leu Gln Ile Thr Thr
 1   5   10   15

Gly Leu Phe Leu Ala Met His Tyr Ser Pro Asp Ala Ser Thr Ala Phe
            20   25   30

Ser Ser Ile Ala His Ile Thr Arg Asp Val Asn Tyr Gly
            35   40   45

<210> 1451
<211> 34
<212> PRT
<213> Homo sapiens

<400> 1451
Lys Leu Leu Asp Asp Asn Gly Asn Ile Ala Glu Glu Leu Ser Ile Leu
 1   5   10   15

Lys Trp Asn Thr Asp Ser Val Glu Glu Phe Leu Ser Glu Lys Leu Glu
            20   25   30

Arg Ile

```
<210> 1452
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1452
Pro Arg Val Arg Leu Xaa Asp Glu Thr Asn Ile Cys Asn Gly Lys Pro
 1               5                  10                  15


Val Asp Gly Leu Thr Thr Leu Arg Asn Gly Thr Leu Val Ala Phe Arg
             20                  25                  30


Gly His Tyr Phe Trp Met Leu Ser Pro Phe Ser Pro Pro Ser Pro Ala
             35                  40                  45


Arg Arg Ile Thr Glu Val Leu Gly Asn Pro Phe Pro His
     50                  55                  60



<210> 1453
<211> 44
<212> PRT
<213> Homo sapiens

<400> 1453
Arg Glu Gln Lys Leu Glu Leu His Arg Gly Ala Ala Ala Leu Glu Leu
 1               5                  10                  15


Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Gly Cys Ser Glu Pro
             20                  25                  30


Arg Ser His His Cys Thr Pro Val Trp Ala Thr Glu
             35                  40



<210> 1454
<211> 118
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
```

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<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (106)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1454
Thr Arg Val Ala Pro Ser Val Leu Arg Leu Ala Met Thr Ser Tyr Ser
 1               5                  10                  15


Tyr Arg Gln Ser Ser Ala Thr Ser Ser Phe Gly Gly Leu Gly Gly Gly
            20                  25                  30


Ser Val Arg Ile Gly Pro Gly Val Ala Phe Arg Ala Pro Ser Ile His
            35                  40                  45


Gly Gly Ser Gly Gly Arg Gly Val Ser Val Ser Ser Ala Arg Phe Val
        50                  55                  60


Ser Ser Ser Ser Ser Gly Gly Tyr Gly Gly Gly Xaa Gly Gly Val Leu
65                  70                  75                  80


Thr Ala Ser Xaa Gly Leu Leu Ala Gly Asn Glu Lys Leu Thr Met Gln
                85                  90                  95


Asn Xaa Xaa Thr Ala Trp Leu Leu Leu Xaa Lys Phe Ala Pro Xaa Gly
            100                 105                 110


Ala Lys Gly Thr Lys Ser
```

115

```
<210> 1455
<211> 48
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1455
Ala Xaa Glu Asn Ser Arg Ile Val Leu Gln Ile Asp Asn Ala Arg Leu
 1               5                  10                  15

Ala Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu Gln Ala Leu Arg
            20                  25                  30

Met Xaa Val Glu Ala Asp Ile Asn Gly Leu Xaa Arg Cys Trp Met Ser
            35                  40                  45
```

```
<210> 1456
<211> 143
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

```
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1456
Gly Asp Tyr Ser His Tyr Tyr Thr Thr Ile Gln Asp Leu Arg Asp Lys
 1               5                  10                  15

Ile Leu Gly Ala Thr Ile Glu Asn Ser Arg Ile Val Leu Gln Ile Asp
               20                  25                  30

Asn Ala Arg Leu Ala Ala Asp Asp Phe Arg Thr Lys Phe Glu Thr Glu
           35                  40                  45

Gln Ala Leu Arg Met Ser Val Glu Ala Asp Ile Asn Gly Leu Arg Arg
       50                  55                  60

Val Leu Asp Glu Leu Thr Leu Ala Arg Thr Asp Leu Glu Met Gln Ile
 65                  70                  75                  80

Glu Gly Leu Lys Glu Glu Leu Ala Tyr Leu Lys Lys Asn His Glu Glu
                   85                  90                  95

Glu Ile Ser Thr Leu Arg Gly Gln Val Gly Gly Gln Val Ser Val Glu
               100                 105                 110

Val Asp Ser Ala Pro Gly Thr Asp Leu Ala Lys Ile Leu Ser Asp Met
           115                 120                 125

Arg Ser Xaa Tyr Glu Val Met Ala Xaa Gln Asn Arg Lys Asp Ala
       130                 135                 140
```

```
<210> 1457
<211> 116
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1457
Gly Cys Val Gly Val Arg Pro Ser Leu His Pro Ala Thr Ser Thr Ala
 1               5                  10                  15

Ser Gly Ser Ala Xaa Pro Thr Leu Ala Arg Ala Met Ala Ser Val Ser
               20                  25                  30

Glu Leu Ala Cys Ile Tyr Ser Ala Leu Ile Leu His Asp Asp Glu Val
```

```
               35                    40                    45

Thr Val Thr Glu Asp Lys Ile Asn Ala Leu Ile Lys Ala Ala Gly Val
         50                  55                  60

Asn Val Glu Pro Phe Trp Pro Gly Leu Phe Ala Lys Ala Leu Ala Asn
 65                  70                  75                  80

Val Asn Ile Gly Ser Leu Ile Cys Asn Val Gly Ala Gly Gly Pro Ala
                 85                  90                  95

Pro Ala Ala Gly Ala Ala Thr Ser Arg Arg Ser Cys Pro Leu His Cys
                100                 105                 110

Cys Cys Ser Ser
             115
```

<210> 1458
<211> 115
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1458

```
Leu Val Pro Asn Ser Ala Arg Ala Ala Ala Ser Ala Ala Asp Ala Ala
  1               5                  10                  15

Ala Met Arg Tyr Val Ala Ser Tyr Leu Leu Ala Ala Leu Gly Gly Asn
                 20                  25                  30

Ser Ser Pro Ser Ala Lys Gly Ile Lys Lys Ile Leu Asp Asn Xaa Gly
             35                  40                  45

Ile Glu Ala Asp Asp Asp Arg Leu Asn Lys Val Ile Ser Glu Leu Asn
         50                  55                  60

Gly Lys Asn Ile Glu Asp Val Ile Ala Gln Gly Ile Gly Lys Leu Ala
 65                  70                  75                  80

Ser Val Pro Ala Gly Gly Ala Val Ala Val Ser Ala Ala Pro Gly Ser
                 85                  90                  95

Ala Ala Pro Ala Ala Gly Ser Ala Pro Ala Ala Ala Glu Glu Lys Lys
                100                 105                 110
```

```
Asp Glu Lys
        115


<210> 1459
<211> 132
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (126)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1459
Ala Ser Asp Ala Leu His Ser Leu Ser Ala Pro Val Leu Arg Leu Ser
 1           5               10                  15

Ser Arg Ser Ala Ala Arg Pro Ala Thr Met Thr Glu Gln Ala Ile Ser
            20              25              30

Phe Ala Lys Asp Phe Leu Ala Gly Gly Ile Ala Ala Ala Ile Ser Lys
        35              40              45

Thr Ala Val Ala Pro Ile Glu Arg Val Lys Leu Leu Leu Gln Val Gln
    50              55              60

His Ala Ser Lys Gln Ile Ala Ala Asp Lys Gln Tyr Lys Gly Ile Val
65              70              75              80

Asp Cys Ile Val Arg Ile Pro Lys Glu Gln Gly Val Leu Ser Phe Trp
                85              90              95

Arg Gly Asn Leu Ala Asn Val Ile Arg Tyr Phe Pro Thr Gln Ala Leu
            100             105             110
```

```
Asn Phe Xaa Phe Lys Asp Lys Tyr Lys Gln Xaa Phe Leu Xaa Gly Val
        115                 120             125

Xaa Lys His Thr
    130
```

```
<210> 1460
<211> 124
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (120)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (121)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1460
Xaa Ser Xaa Lys Thr Gly Phe Xaa Asp Trp Ile Ser Val Ala Tyr Tyr
 1   5   10   15

Gly Cys Phe Arg Glu Gly Ala Thr Ile Ile Gln Val Gly Lys Leu Ile
            20   25   30

Lys Glu Ala Ala Gly Lys Ser Asn Leu Lys Arg Val Thr Leu Glu Leu
        35   40   45

Gly Gly Lys Ser Pro Cys Ile Val Leu Ala Asp Ala Asp Leu Asp Asn
     50   55   60

Ala Val Glu Phe Ala His His Gly Val Phe Tyr His Gln Gly Gln Xaa
 65   70   75   80

Cys Ile Ala Ala Xaa Arg Ile Phe Val Glu Glu Ser Ile Tyr Asp Glu
            85   90   95

Phe Val Arg Arg Ser Val Glu Arg Val Lys Xaa Ile Ser Leu Gly Xaa
            100   105   110

Pro Leu Thr Pro Xaa Val Xaa Xaa Xaa Pro Ser Asp
            115   120

<210> 1461
<211> 179
<212> PRT
<213> Homo sapiens

<220>

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<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

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<400> 1461
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Val Val Pro Leu Ala
 1               5                   10                  15

Gly Thr Asn Gly Glu Thr Thr Thr Gln Gly Leu Asp Gly Leu Ser Glu
            20                  25                  30
```

1534

```
Arg Cys Ala Gln Tyr Lys Lys Asp Gly Ala Asp Phe Ala Lys Trp Arg
        35              40              45

Cys Val Leu Lys Ile Gly Glu His Thr Pro Ser Ala Leu Ala Ile Met
    50              55              60

Glu Asn Ala Asn Val Leu Ala Arg Tyr Ala Ser Ile Cys Gln Gln Asn
65              70              75              80

Gly Ile Val Pro Ile Val Glu Pro Glu Ile Leu Pro Asp Gly Asp His
            85              90              95

Asp Leu Lys Arg Leu Xaa Val Cys Asp Arg Lys Gly Ala Trp Leu Ala
        100             105             110

Ala Thr Arg Leu Leu Ser Asp His His Ile Tyr Leu Xaa Gly Thr Leu
    115             120             125

Leu Lys Pro Asn Met Val Pro Gln Ala Met Leu Ala Leu Xaa Ser Phe
    130             135             140

Xaa Met Lys Glu Ile Ala His Gly Glu Pro Val Ser Xaa Ala Val Pro
145             150             155             160

Ala Gln Xaa Pro Pro Arg Leu Ser Leu Gly Ile Asn Xaa Xaa Cys Xaa
            165             170             175

Gly Arg Pro
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<210> 1462
<211> 31
<212> PRT
<213> Homo sapiens

<220>
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<400> 1462
Ala Asn Ser Leu Ala Cys Gln Gly Lys Tyr Thr Pro Xaa Gly Gln Ala
  1           5               10              15

Gly Ala Ala Ala Ser Glu Ser Leu Phe Val Ser Asn His Ala Tyr
            20              25              30
```

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<210> 1463
<211> 71
<212> PRT
<213> Homo sapiens

<220>
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<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1463
Asp Asp Cys Glu Phe Lys Ala Glu Gly Asn Ser Lys Phe Thr Tyr Thr
 1               5                  10                  15


Val Leu Glu Asp Gly Cys Thr Lys His Thr Gly Glu Trp Ser Lys Thr
                20                  25                  30


Val Phe Glu Tyr Arg Thr Arg Lys Ala Val Arg Leu Pro Ile Val Asp
            35                  40                  45


Ile Ala Pro Tyr Asp Ile Gly Gly Pro Asp Gln Glu Phe Gly Val Asp
        50                  55                  60


Xaa Gly Pro Val Xaa Phe Leu
 65                  70
```

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<210> 1464
<211> 77
<212> PRT
<213> Homo sapiens

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<222> (10)
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1464
Xaa Gly Thr Arg His Xaa Leu Arg Thr Xaa Asn Gln Ser Ser Asp Glu
 1   5   10   15

Leu Gln Leu Ser Met Gly Asn Ala Met Phe Val Lys Glu Gln Leu Ser
            20   25   30

Leu Leu Asp Arg Phe Thr Glu Asp Ala Lys Arg Leu Tyr Gly Ser Glu
            35   40   45

Ala Phe Ala Thr Asp Phe Gln Asp Ser Ala Ala Ala Lys Lys Leu Ile
        50   55   60

Asn Asp Tyr Val Lys Asn Gly Thr Arg Gly Thr Ile Thr
65   70   75

<210> 1465
<211> 105
<212> PRT
<213> Homo sapiens

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<220>
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<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1465
Leu Lys Gly Arg Pro Gly Phe Pro Gly Ser Lys Gly Glu Ala Gly Phe
 1   5   10   15

Phe Gly Ile Pro Gly Leu Lys Gly Leu Ala Gly Glu Pro Gly Phe Lys
            20   25   30

```
Gly Ser Arg Gly Asp Pro Gly Pro Pro Gly Pro Pro Pro Val Ile Leu
        35              40              45

Pro Gly Met Lys Asp Ile Lys Gly Glu Lys Gly Asp Glu Gly Pro Met
        50              55              60

Gly Leu Lys Gly Tyr Leu Gly Ala Lys Gly Ile Gln Gly Met Pro Gly
65              70              75              80

Ile Pro Xaa Leu Ser Gly Ile Pro Gly Leu Pro Gly Arg Pro Gly His
            85              90              95

Ile Xaa Gly Ile Lys Gly Xaa Xaa Gly
        100             105
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<210> 1466
<211> 36
<212> PRT
<213> Homo sapiens

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<400> 1466
```
Arg Pro Gly Leu Cys Ala Lys Thr Val Phe Lys Ala Leu Gln Ala Pro
 1               5               10              15

Ala Leu Xaa Glu Glu His Gly Glu Gly Trp Arg Leu His Pro Trp Gly
            20              25              30

Val Trp Glu Thr
        35
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<210> 1467
<211> 82
<212> PRT
<213> Homo sapiens

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<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1467
Arg Val Pro Ala Met Ala Ala Lys Gly Gly Thr Val Lys Ala Ala Ser
 1   5   10   15

Ala Phe Asn Ala Thr Glu Asp Ala Gln Thr Leu Arg Lys Ala Met Lys
            20   25   30

Gly Leu Gly Thr Asp Glu Asp Ala Ile Ile Ser Val Leu Ala Tyr Arg
        35   40   45

Asn Thr Ala Gln Arg Gln Glu Ile Arg Thr Ala Leu Gln Glu His His
    50   55   60

Ser Ala Gly Asp Leu Val Leu Arg Asn Gly Pro Xaa Phe Val Xaa Xaa
65   70   75   80

Trp Xaa

<210> 1468
<211> 83
<212> PRT
<213> Homo sapiens

<220>
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<222> (15)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (83)
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<400> 1468
Gly Trp His Leu Gly Pro Pro Gly Ser Trp Cys Trp Trp Ser Xaa Cys
 1               5                   10                  15

Ile Thr Gly Pro Asn Thr Ser Xaa Cys Cys Trp Thr His Phe Glu Lys
            20                  25                  30

Pro Arg Xaa Ile Asp Asn Val Leu Val Ile Phe Ser His Asp Phe Trp
        35                  40                  45

Ser Thr Glu Ile Asn Gln Leu Ile Ala Gly Val Asn Xaa Cys Pro Val
    50                  55                  60

Leu Xaa Val Phe Phe Pro Phe Ser Ile Gln Leu Phe Pro Asn Xaa Phe
65                  70                  75                  80

Pro Xaa Xaa


<210> 1469
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<211> 26
<212> PRT
<213> Homo sapiens

<400> 1469
Glu Lys Asp Glu Tyr Ala Cys Arg Val Asn His Val Thr Leu Ser Gln
 1               5                   10                  15

Pro Lys Ile Val Lys Trp Asp Arg Asp Met
             20                  25


<210> 1470
<211> 168
<212> PRT
<213> Homo sapiens

<220>
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<222> (17)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (139)
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<220>
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<222> (153)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (158)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1470
Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Gly Gly Arg Ser
 1   5   10   15

Xaa Gly Ser Lys Leu Thr Tyr Ala Cys Met Arg Arg His Ser Ser Ser
            20   25   30

Ile Val Ser Pro Lys Phe Asn Ser Leu Ala Val Val Leu Gln Arg Arg
            35   40   45

Asp Trp Glu Asn Pro Gly Val Thr Gln Leu Asn Arg Leu Ala Ala His
        50   55   60

Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu Glu Ala Arg Thr Asp Arg
65   70   75   80

Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly Lys Trp Asp Ala Pro Cys
                85   90   95

Ser Gly Ala Leu Ser Ala Ala Gly Val Val Val Thr Arg Ser Val Thr
            100   105   110

Ala Thr Leu Ala Ser Ala Leu Arg Pro Val Leu Ser Phe Leu Pro Phe
            115   120   125

Leu Ser Arg His Val Arg Arg Xaa Ser Pro Xaa Ser Xaa Lys Xaa Gly
        130   135   140

Ala Xaa Phe Xaa Val Pro Ile Xaa Xaa Leu Arg Asp Leu Xaa Pro Lys
145   150   155   160

Asn Leu Ile Arg Val Met Val Thr
                165

1542

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<210>  1471
<211>  131
<212>  PRT
<213>  Homo sapiens

<220>
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<222>  (22)
<223>  Xaa equals any of the naturally occurring L-amino acids

<220>
<221>  SITE
<222>  (88)
<223>  Xaa equals any of the naturally occurring L-amino acids

<220>
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<222>  (111)
<223>  Xaa equals any of the naturally occurring L-amino acids

<220>
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<223>  Xaa equals any of the naturally occurring L-amino acids

<220>
<221>  SITE
<222>  (119)
<223>  Xaa equals any of the naturally occurring L-amino acids

<400>  1471
Cys His Leu Asn Ser Ile His Trp Pro Ser Phe Tyr Asn Val Val Thr
 1               5                  10                  15

Gly Lys Thr Leu Ala Xaa Pro Asn Leu Ile Ala Leu Gln His Ile Pro
             20                  25                  30

Leu Ser Pro Ala Gly Ser Asn Ser Glu Glu Ala Arg Thr Asp Arg Pro
             35                  40                  45

Ser Gln Gln Leu Arg Ser Leu Asn Gly Glu Trp Asp Ala Pro Cys Ser
    50                  55                  60

Gly Ala Leu Ser Ala Ala Gly Val Val Val Thr Arg Ser Val Thr Ala
65                  70                  75                  80

Thr Leu Ala Ser Ala Leu Ala Xaa Ala Pro Phe Ala Phe Phe Pro Ser
                85                  90                  95
```

Phe Leu Ala Thr Phe Ala Gly Phe Pro Arg Gln Ala Leu Asn Xaa Gly
            100   105   110

Leu Pro Leu Xaa Phe Arg Xaa Ser Ala Val Arg His Leu Asp Pro Lys
            115   120   125

Lys Leu Asp
        130

<210> 1472
<211> 179
<212> PRT
<213> Homo sapiens

<220>
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<220>
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<222> (35)
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<220>
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<220>
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1545

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (167)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1472
Lys Lys Lys Lys Xaa Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
  1           5               10              15

Lys Lys Lys Lys Gly Gly Arg Xaa Xaa Gly Ser Lys Leu Thr Tyr Ala
          20          25              30

Cys Met Xaa Arg His Ser Ser Xaa Ile Gly Ser Pro Lys Phe Asn Ser
          35              40              45

Leu Ala Xaa Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr
      50              55              60

Gln Leu Asn Arg Leu Ala Xaa His Pro Xaa Phe Ala Ser Trp Arg Asn
65              70              75              80

Ser Xaa Lys Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu
              85              90              95

Asn Gly Lys Trp Asp Xaa Pro Cys Xaa Gly Ala Leu Xaa Xaa Ala Gly
          100             105             110
```

```
Val Xaa Val Thr Xaa Xaa Xaa Thr Ala Thr Leu Ala Xaa Ala Leu Ala
        115             120             125

Pro Ala Pro Phe Ala Phe Phe Pro Ser Phe Xaa Ala Thr Phe Ala Gly
        130             135             140

Phe Pro Arg Gln Ala Xaa Asn Arg Gly Leu Pro Leu Gly Phe Arg Leu
145             150             155             160

Xaa Ala Leu Arg Asp Leu Xaa Pro Gln Lys Asn Leu Ile Arg Gly Asp
            165             170             175

Gly Ser Xaa
```

```
<210> 1473
<211> 58
<212> PRT
<213> Homo sapiens
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```
<400> 1473
Ile Ala Ser Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met
1               5               10              15

Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala
            20              25              30

Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
        35              40              45

Asn Arg Leu Ala Ala His Pro Pro Phe Ala
    50              55
```

```
<210> 1474
<211> 70
<212> PRT
<213> Homo sapiens
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```
<400> 1474
Ile Ala Ser Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met
1               5               10              15

Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala
            20              25              30

Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
        35              40              45
```

Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu
    50   55   60

Glu Ala Arg Thr Asp Arg
 65   70

<210> 1475
<211> 62
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1475
Leu Pro Xaa Ala Xaa Tyr Thr Xaa Xaa Gly Thr Thr Pro His Tyr Arg

1548

```
        1                    5                    10                   15

      Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly Ser Thr
                  20                  25                  30

      His Ala Ser Glu Lys Lys Lys Lys Lys Lys Lys Lys Lys Arg Xaa
                  35                  40                  45

      Asp Asp Leu Glu Asp Pro Lys Leu Thr Tyr Xaa Xaa Met Gln
            50                  55                  60
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<210> 1476
<211> 80
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (44)

1549

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1476
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Ile Arg Xaa Xaa Xaa Leu Arg Xaa Asp Thr Thr His Tyr Arg Glu Ser
 1               5               10              15

Trp Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly Xaa Thr His Ala
            20              25              30

Ser Val Glu Ile Cys Pro Pro Xaa Ser Arg Pro Xaa Ser Ser Gln Ser
        35              40              45

Asn Gly Glu Gly Tyr Ser Xaa Cys Arg Arg Pro Gln Ala Leu Glu Ala
        50              55              60

Ala Thr Tyr Leu Asn Pro Val Pro Xaa Arg Ile Leu Leu Lys Pro Phe
 65              70              75              80
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<210> 1477
<211> 52
<212> PRT
<213> Homo sapiens

<400> 1477
```
Arg Gln Val Pro His Glu Arg Ala Val Arg Asp Gly Arg Gly Gly Gly
 1               5               10              15

Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met Arg Arg His Ser
            20              25              30

Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala Val Val Leu Gln
        35              40              45

Arg Arg Asp Trp
        50
```

<210> 1478
<211> 154
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (140)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1478
Ile Ala Ser Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met
 1   5   10   15

Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala
              20   25   30

Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
          35   40   45

Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu
     50   55   60

Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly
 65   70   75   80

Glu Trp Asp Ala Pro Cys Ser Gly Ala Leu Ser Ala Ala Gly Val Val
              85   90   95

Val Thr Arg Ser Val Thr Ala Thr Leu Ala Ser Ala Leu Ala Pro Ala
              100   105   110

Pro Phe Ala Phe Phe Pro Ser Phe Leu Ala Thr Phe Ala Gly Phe Pro
         115   120   125

Arg Gln Ala Leu Asn Arg Gly Leu Pro Leu Gly Xaa Arg Phe Lys Cys
     130   135   140

Phe Thr Asp Leu Asp Pro Lys Lys Leu Asp
145   150

<210> 1479
<211> 130
<212> PRT
<213> Homo sapiens

<220>

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<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids


<400> 1479
Ile Ala Gly Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met
 1           5               10              15


Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala
            20              25              30


Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
        35              40              45


Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu
    50              55              60


Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly
65              70              75              80


Glu Trp Asp Ala Pro Cys Ser Gly Ala Leu Ser Ala Ala Gly Val Val
            85              90              95


Val Thr Arg Ser Val Thr Ala Thr Leu Ala Lys Arg Pro Lys Arg Pro
            100             105             110


Phe Leu Ser Leu Ser Ser Phe Leu Phe Xaa Pro Arg Ser Ala Gly Phe
            115             120             125


Ser Pro
    130



<210> 1480
<211> 131
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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1552

<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1480

```
Ile Ala Ser Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met
 1               5                  10                 15

Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala
            20                  25                  30

Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly Val Thr Gln Leu
        35                  40                  45

Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp Arg Asn Ser Glu
    50                  55                  60

Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg Ser Leu Asn Gly
65                  70                  75                  80

Glu Trp Asp Ala Pro Cys Ser Gly Ala Leu Ser Ala Ala Gly Val Val
                85                  90                  95

Val Thr Arg Ser Val Thr Xaa Thr Leu Ala Ser Ala Leu Ala Pro Xaa
            100                 105                 110

Pro Phe Ala Phe Phe Leu Leu Ser Arg His Gly Arg Pro Ala Xaa Pro
        115                 120                 125

Xaa Lys Leu
    130
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<210> 1481
<211> 112
<212> PRT
<213> Homo sapiens

<220>
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<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1481
Xaa Ser Ser Arg Ser Arg Ala Ala Arg Ser Arg Gly Ser Lys Leu Thr
 1   5   10   15

Tyr Ala Cys Met Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe
            20   25   30

Asn Ser Leu Ala Val Val Leu Gln Arg Arg Asp Trp Glu Asn Pro Gly
        35   40   45

Val Thr Gln Leu Asn Arg Leu Ala Ala His Pro Pro Phe Ala Ser Trp
    50   55   60

His Asn Ser Glu Glu Ala Arg Thr Asp Arg Pro Ser Gln Gln Leu Arg
 65   70   75   80

Ser Leu Asn Gly Glu Trp Asp Xaa Pro Cys Ser Gly Ala Leu Ser Ala
                85   90   95

Ala Gly Val Val Val Thr Arg Ser Val Thr Ala Thr Leu Ala Ala Pro
                100   105   110

<210> 1482
<211> 53
<212> PRT
<213> Homo sapiens

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<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1482
Glu Asn Val Lys Ala Lys Ile Gln Asp Lys Glu Gly Ile Pro Pro Glu

```
    1               5                    10                    15

Xaa Ser Arg Glu Leu Asn Leu Cys Leu Xaa Lys Gln Leu Gly Arg Met
            20                    25                    30


Gly Arg Tyr Phe Val Leu Asn Leu Gln Tyr Phe Lys Arg Gly Ser Tyr
            35                    40                    45


Phe Xaa Ile Leu Cys
        50
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<210> 1483
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1483
```
Ala Asn Met Gln Ile Phe Val Lys Thr Leu Thr Gly Lys Thr Ile Thr
 1               5                    10                    15


Leu Glu Val Glu Pro Ser Asp Thr Ile Glu Asn Val Lys Ala Lys Ile
            20                    25                    30


Gln Asp Lys Glu Gly Ile Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala
            35                    40                    45


Gly Lys Gln Leu Glu Gly Trp Xaa Gln Leu Xaa Gln Thr
        50              55                    60
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<210> 1484
<211> 27
<212> PRT
<213> Homo sapiens

<220>
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<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1484
Gly Glu Gly Pro Thr Xaa Pro Leu Pro Ser Glu Thr Xaa Gly Asp Val
  1   5   10   15

Ala Pro Leu Xaa Cys Xaa Xaa Gly Leu Asn Met
            20   25

<210> 1485
<211> 45
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1485
Phe Leu Ala Ala Gly Asn Pro Leu Arg Trp Pro Xaa Ile Leu Thr Ser
 1               5                  10                  15


Arg Trp Lys Ser Asp Ile Tyr Xaa Arg Lys Ser Asp Gly Xaa Tyr Ile
                20                  25                  30


Ile Xaa Leu Lys Arg Thr Trp Glu Lys Leu Leu Leu Gly
        35                  40                  45




<210> 1486
<211> 140
<212> PRT
<213> Homo sapiens

<400> 1486
Pro Arg Val Arg Arg Ala Glu Trp Leu Cys Gly Arg Val Ser Glu Thr
 1               5                  10                  15


Gly Ser Ala Cys Ser Met Ala Asp Gln Leu Thr Glu Glu Gln Ile Ala
                20                  25                  30


Glu Phe Lys Glu Ala Phe Ser Leu Phe Asp Lys Asp Gly Asp Gly Thr
        35                  40                  45


Ile Thr Thr Lys Glu Leu Gly Thr Val Met Arg Ser Leu Gly Gln Asn
    50                  55                  60


Pro Thr Glu Ala Glu Leu Gln Asp Met Ile Asn Glu Val Asp Ala Asp
65                  70                  75                  80


Gly Asn Gly Thr Ile Asp Phe Pro Glu Phe Leu Thr Met Met Ala Arg
                85                  90                  95


Lys Met Lys Asp Thr Asp Ser Glu Glu Glu Ile Arg Glu Ala Phe Arg
                100                 105                 110


Val Phe Asp Lys Asp Gly Asn Gly Tyr Ile Ser Ala Ala Glu Leu Arg
                115                 120                 125


His Val Met Thr Asn Leu Gly Arg Glu Val Asn Arg
    130                 135                 140
```

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<210> 1487
<211> 36
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1487
Xaa Leu Gly Arg Asn Trp Ala Xaa Phe Thr Gly Lys Xaa Val Gly Xaa
 1               5                  10                  15

Ala Ser Xaa Asn Val Tyr Val His Ile Pro His Leu Arg Asn Ser His
            20                  25                  30

Glu Lys Xaa Ser
          35


<210> 1488
<211> 34
<212> PRT
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<213> Homo sapiens

<400> 1488
Ser Gly Pro Leu Trp Ile Leu Gly Asp Val Phe Ile Gly Arg Tyr Tyr
1   5   10   15

Thr Val Phe Asp Arg Asp Asn Asn Arg Val Gly Phe Ala Glu Ala Ala
            20   25   30

Arg Leu

<210> 1489
<211> 160
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1489
Pro Thr Asn Xaa Xaa Lys Ser Xaa Glu Leu His Arg Gly Gly Gly Arg
1   5   10   15

Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Ser Thr
            20   25   30

Gln Arg Pro Val Asp Ile Val Phe Leu Leu Asp Gly Ser Glu Arg Leu
            35   40   45

Gly Glu Gln Asn Phe His Lys Ala Arg Arg Phe Val Glu Gln Val Ala
    50   55   60

```
Arg Arg Leu Thr Leu Ala Arg Arg Asp Asp Asp Pro Leu Asn Ala Arg
65               70              75              80

Val Ala Leu Leu Gln Phe Gly Gly Pro Gly Glu Gln Gln Val Ala Phe
            85              90              95

Pro Leu Ser His Asn Leu Thr Ala Ile His Glu Ala Leu Glu Thr Thr
            100             105             110

Gln Tyr Leu Asn Ser Phe Ser His Val Gly Ala Gly Val Val His Ala
        115             120             125

Ile Asn Ala Ile Val Arg Ser Pro Arg Gly Gly Ala Arg Arg His Ala
    130             135             140

Glu Leu Pro Ser Trp Ser Ser Arg Thr Ala Ser Arg Ala Thr Thr Xaa
145             150             155             160
```

<210> 1490
<211> 105
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

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<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (62)
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<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (82)
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<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1490
Ala Gln Met Gly Met Leu Lys Gly Pro Leu Leu Asn Lys Phe Leu Thr
 1               5                  10                  15


Thr Ala Lys Asp Lys Asn Arg Trp Glu Asp Xaa Gly Lys Gln Leu Tyr
            20                  25                  30


Asn Val Glu Ala Thr Ser Tyr Xaa Leu Xaa Ala Leu Leu Gln Leu Lys
            35                  40                  45


Xaa Phe Asp Phe Val Pro Pro Val Val Xaa Xaa Leu Asn Xaa Gln Arg
    50                  55                  60
```

```
Xaa Tyr Gly Gly Gly Tyr Gly Ser Thr Gln Ala Thr Phe Met Val Phe
 65              70              75                      80

Gln Xaa Leu Ala Gln Xaa Gln Lys Asp Gly Pro Asp His Gln Ala Leu
              85              90                      95

Asn Leu Xaa Val Xaa Leu Gln Met Leu
            100             105
```

```
<210> 1491
<211> 125
<212> PRT
<213> Homo sapiens

<400> 1491
Arg Asn Thr Leu Ile Ile Tyr Leu Asp Lys Val Ser His Ser Glu Asp
 1               5               10                      15

Asp Cys Leu Ala Phe Lys Val His Gln Tyr Phe Asn Val Glu Leu Ile
              20              25                      30

Gln Pro Gly Ala Val Lys Val Tyr Ala Tyr Tyr Asn Leu Glu Glu Ser
              35              40                      45

Cys Thr Arg Phe Tyr His Pro Glu Lys Glu Asp Gly Lys Leu Asn Lys
    50              55                      60

Leu Cys Arg Asp Glu Leu Cys Arg Cys Ala Glu Glu Asn Cys Phe Ile
 65              70              75                      80

Gln Lys Ser Asp Asp Lys Val Thr Leu Glu Glu Arg Leu Asp Lys Ala
              85              90                      95

Cys Glu Pro Gly Val Asp Tyr Val Tyr Lys Thr Arg Leu Ala Arg Phe
              100             105             110

Lys Leu Ser Asn Asp Phe Asp Arg Val His His Gly His
              115             120             125
```

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<210> 1492
<211> 68
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (62)
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1492
Arg Pro Thr Arg Pro Ala Leu Ser Ile Ile Ala Leu Glu Ile Gln Ala
 1   5   10   15

Gln Lys Cys Val Glu Leu Thr Glu Gly Ile Glu Cys Leu Gln Thr His
            20   25   30

Ser Lys Ile Asn Gly Arg Asp Leu Thr Phe Trp Gln Glu Leu Val Ser
        35   40   45

Lys Cys Leu Thr Glu Tyr Ser Ser Lys Gln Ser Gly Ser Xaa Pro Asn
    50   55   60

Val Pro Glu Val
 65

<210> 1493
<211> 74
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1493
Glu Glu Ile Gln Lys His Asn His Ser Lys Ser Thr Trp Xaa Asp Pro
 1               5                  10                  15

Xaa Thr Thr Arg Cys Thr Asn Leu Thr Lys Phe Leu Xaa Glu Ala Ser
                20                  25                  30

Leu Val Gly Glu Glu Val Leu Arg Gly Thr Ser Leu Glu Val Thr Leu
            35                  40                  45

Leu Glu Glu Xaa Leu Arg Xaa Val Arg Gly Thr Phe Thr Xaa Xaa Pro
        50                  55                  60

Lys Gly Lys Leu Phe Pro Lys Thr Phe Xaa
 65                  70


<210> 1494
<211> 54
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1494
Asp Ala Thr Ser Pro Ile Ile Glu Glu Leu Ile Thr Phe His Asp His
 1               5                  10                  15
```

```
Ala Leu Ile Ile Ile Phe Leu Ile Cys Phe Leu Val Leu Tyr Ala Leu
            20              25              30

Phe Leu Thr Leu Thr Thr Lys Leu Thr Asn Thr Asn Ile Xaa Asp Ala
        35              40              45

Xaa Glu Ile Glu Thr Val
    50
```

<210> 1495
<211> 38
<212> PRT
<213> Homo sapiens

<400> 1495
```
Phe Phe Gly His Pro Glu Val Tyr Ile Leu Ile Leu Pro Gly Phe Gly
 1               5              10              15

Ile Ile Ser His Ile Val Thr Tyr Tyr Ser Gly Lys Lys Glu Pro Phe
            20              25              30

Gly Tyr Ile Gly Met Val
            35
```

<210> 1496
<211> 46
<212> PRT
<213> Homo sapiens

<400> 1496
```
Ala Phe Tyr His Ser Ser Leu Ala Pro Thr Pro Gln Leu Gly Gly His
 1               5              10              15

Trp Pro Pro Thr Gly Ile Thr Pro Leu Asn Pro Leu Glu Val Pro Leu
            20              25              30

Leu Asn Thr Ser Val Leu Leu Ala Ser Gly Val Ser Ile Thr
            35              40              45
```

<210> 1497
<211> 60
<212> PRT
<213> Homo sapiens

<400> 1497

```
Ala Gln Val Gly Leu Gln Asp Ala Thr Ser Pro Ile Ile Glu Glu Leu
 1               5                   10                  15

Ile Thr Phe His Asp His Ala Leu Ile Ile Phe Leu Ile Cys Phe
                20              25              30

Leu Val Leu Tyr Ala Leu Phe Leu Thr Leu Thr Thr Lys Leu Thr Asn
            35              40              45

Thr Asn Ile Ser Asp Ala Gln Glu Ile Glu Thr Val
        50              55              60
```

<210> 1498
<211> 45
<212> PRT
<213> Homo sapiens

<400> 1498
```
Thr Tyr Glu Tyr Thr Asp Tyr Gly Gly Leu Ile Phe Asn Ser Tyr Ile
 1               5                   10                  15

Leu Pro Pro Leu Phe Leu Glu Pro Gly Asp Leu Arg Leu Leu Asp Gly
            20              25              30

Asp Asn Arg Val Val Leu Pro Ile Glu Ala Pro Phe Val
        35              40              45
```

<210> 1499
<211> 69
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1499
```
His Arg Leu Asp Phe Leu Gln Leu Met Ile Asp Ser Gln Asn Ser Lys
 1               5                   10                  15

Glu Thr Glu Ser His Lys Ala Leu Ser Asp Leu Glu Leu Ala Ala Gln
            20              25              30

Ser Ile Ile Phe Ile Phe Ala Gly Tyr Glu Thr Thr Ser Ser Val Leu
            35              40                  45
```

Ser Phe Thr Leu Tyr Glu Leu Ala Thr His Pro Asp Val Gln Xaa Lys
     50   55   60

Leu Gln Lys Gly Asp
 65

<210> 1500
<211> 35
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1500
Arg Leu Thr Ser Thr Ala Cys Ala Glu Ser Trp Asp Glu Leu Thr Leu
 1   5   10   15

Ala Arg Xaa Asp Leu Glu Xaa Gln Ile Glu Gly Leu Asn Glu Xaa Ala
             20   25   30

Ser Leu Thr
         35

<210> 1501
<211> 126
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1501
Phe Xaa Ala Pro Ser Arg Ile Ser Ala Trp Xaa Gly Pro Pro Ala Ser
 1               5                  10                  15

Thr Pro Ala Ser Thr Met Ser Ile Lys Val Thr Gln Lys Ser Tyr Lys
            20              25                  30

Xaa Ser Thr Ser Ser Pro Arg Ala Phe Ser Ser Arg Ser Tyr Thr Asn
        35              40                  45

Xaa Pro Gly Ser Arg Ile Asn Xaa Ser Xaa Phe Ser Arg Ile Gly Ser
    50                  55                  60

Ser Asn Xaa Xaa Ser Gly Leu Gly Gly Gly Tyr Xaa Gly Ala Ser Xaa
65                  70                  75                  80

Met Xaa Gly Ile Thr Ala Val Thr Val Asn Gln Ser Leu Leu Xaa Pro
            85                  90                  95

Leu Xaa Leu Glu Val Asp Pro Asn Ile Gln Ala Val Arg Thr Gln Glu
        100                 105                 110

Lys Glu Gln Ile Xaa Thr Leu Asn Asn Lys Phe Ala Ser Ser
        115                 120                 125


<210> 1502
<211> 84
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1502
Gln Arg Asn Ser Xaa Gly Ser Arg Thr Xaa Xaa Ser Arg Xaa Xaa Cys
 1               5                  10                  15


Lys Xaa Val Ala Met Phe Ser Trp Asp Pro Xaa Leu Val Xaa Gly Gly
            20                  25                  30


Gly Ala Ser Lys Met Ala Val Ala His Ala Leu Xaa Glu Lys Ser Xaa
            35                  40                  45


Ala Met Asp Trp Cys Gly Asn Asn Gly His Thr Gly Leu Leu Xaa Arg
    50                  55                  60


Ala Leu Xaa Val His Ser Ser Xaa Pro Trp Ile Xaa Lys Leu Trp Gly
 65                  70                  75                  80


Xaa Ser His His
```

```
<210> 1503
<211> 70
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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1571

<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1503
Val Gly Val Leu Gly Leu Asp Leu Trp Gln Val Lys Ser Gly Thr Ile
 1   5   10   15

Phe Asp Asn Phe Leu Ile Thr Asn Asp Glu Ala Tyr Ala Glu Glu Phe
            20   25   30

Gly Asn Glu Thr Trp Gly Val Thr Lys Ala Ala Glu Lys Gln Met Lys
        35   40   45

Asp Lys Gln Asp Glu Glu Gln Arg Leu Lys Glu Glu Glu Glu Asp Lys
    50   55   60

Lys Arg Lys Glu Xaa Xaa
 65   70

<210> 1504
<211> 42
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amin acids

<400> 1504
Asn Thr Leu Xaa Tyr Xaa Met Lys Ala Thr Xaa Ile Leu Leu Leu Xaa
 1   5   10   15

Ala Gln Leu Ser Trp Ala Gly Pro Phe His Gln Thr Gly Leu Leu Asp
             20   25   30

Ser Met Leu Glu His Glu Ala Tyr Xaa Ile
         35   40

<210> 1505
<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1505
Xaa His Xaa Asp Cys Ser Xaa Pro Il Val Ala Ala Gly Val Gly Glu
 1   5   10   15

```
Phe Glu Ala Gly Ile Ser Lys Asn Gly Gln Thr Arg Glu His Ala Leu
            20                  25                  30

Leu Ala Tyr Thr Leu Gly Val Lys Gln Leu Ile Val Gly Xaa Asn Lys
            35                  40                  45

Met Asp Ser Thr Glu Pro Pro Tyr Ser Gln Lys Arg Tyr Glu Glu Ile
    50                  55                  60

Xaa Lys Glu Val Ser Thr Tyr Xaa
65                  70
```

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<210> 1506
<211> 23
<212> PRT
<213> Homo sapiens

<400> 1506
Ala Glu Thr Arg Lys Arg Lys Gly Leu Lys Glu Gly Ile Pro Ala Leu
    1               5                   10                  15

Asp Asn Phe Leu Asp Lys Leu
                20
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<210> 1507
<211> 87
<212> PRT
<213> Homo sapiens

<220>
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<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1507
Lys Leu Pro Leu Lys Ala Lys Met Gly Lys Glu Lys Thr His Ile Asn
    1               5                   10                  15

Ile Val Val Ile Gly His Val Asp Ser Gly Lys Ser Thr Thr Thr Gly
                20                  25                  30

His Leu Ile Tyr Lys Cys Gly Gly Ile Asp Lys Arg Thr Ile Glu Lys
            35                  40                  45

Phe Glu Lys Glu Ala Ala Glu Met Gly Lys Gly Ser Phe Lys Tyr Ala
    50                  55                  60
```

Trp Val Leu Asp Lys Leu Lys Ala Glu Arg Glu Arg Gly Ile Xaa Ile
 65   70   75   80

Gly Tyr Leu Leu Val Glu Ile
                85

<210> 1508
<211> 110
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1508
Pro Asp Pro Xaa Ile Phe Ala Pro Pro Ile Ser Ala Pro Pro Pro Ser
 1   5   10   15

Ser Gly Thr Arg Asp Arg Ser Gln Arg Ser Leu Asp His Tyr Glu Pro
             20   25   30

Pro Val Gln Pro Arg Gly Pro Cys Pro Arg Ser Phe Glu Leu Leu Val
         35   40   45

Arg Ala Val Gly Ala Ala Ala Ala Ala Asp Ala Ala Arg Ala His Arg
     50   55   60

1575

```
Gln Arg Trp Ser Cys Arg Cys Cys Val Xaa Arg Ala Ala Leu Pro Phe
 65              70              75              80

Val Tyr Arg Pro Arg Lys Glu Ser Ile Pro Lys Met Ile Ser Asn Xaa
             85              90              95

Gln Val Xaa Ala Ile Gly Pro Thr Val Leu Gln Xaa Gly Lys
        100             105             110
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<210> 1509
<211> 60
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
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<220>
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<220>
<221> SITE
<222> (41)
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<220>
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<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 1509
Ser Phe Val Glu Leu Pro Leu Ala Ser Ile Val Ser Leu His Ala Ser
 1   5   10   15

Ser Xaa Gly Gly Arg Leu Gln Thr Ser Pro Xaa Pro Ile Gln Xaa Thr
         20   25   30

Pro Pro Lys Asp Thr Cys Ser Pro Xaa Leu Xaa Met Ser Leu Xaa Pro
         35   40   45

Xaa Lys Leu Cys Arg Arg Arg His Gly Pro Trp Tyr
     50   55   60

<210> 1510
<211> 116
<212> PRT
<213> Homo sapiens

<220>
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<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1510
Gly Thr Ser Ser Ser Gln Arg Phe Tyr Lys Glu Asn Leu Gly Gln Gly
 1   5   10   15

Trp Met Thr Gln Lys His Glu Arg Met Lys Val Tyr Val Pro Thr Gly
         20   25   30

Phe Ser Ala Phe Pro Phe Glu Leu Leu His Thr Pro Glu Lys Trp Val
         35   40   45

Arg Phe Lys Tyr Pro Lys Leu Ile Ser Tyr Ser Tyr Met Val Arg Gly

```
            50                        55                        60

    Gly His Phe Ala Ala Phe Glu Glu Pro Glu Leu Leu Ala Gln Asp Ile
     65                      70                  75                  80

    Arg Lys Phe Leu Ser Val Leu Glu Arg His Xaa Xaa Thr Pro Leu Pro
                        85                  90                  95

    Pro Leu Ala Thr Ser Pro His Asn Ala Leu Gln Xaa Phe Leu Gly Glu
                       100                 105                 110

    Asp Asn Xaa Phe
                115
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<210> 1511
<211> 156
<212> PRT
<213> Homo sapiens

<220>
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<222> (11)
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<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1511
    Arg Glu Gln Lys Leu Glu Leu His Arg Gly Xaa Gly Arg Ser Arg Thr
      1                 5                  10                  15

    Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Arg Asp Arg Gly Gly
                       20                  25                  30

    Phe Pro Pro Arg Gly Pro Arg Gly Ser Arg Gly Asn Pro Ser Gly Gly
                       35                  40                  45

    Gly Asn Val Gln His Arg Ala Gly Asp Trp Gln Cys Pro Asn Pro Ser
           50                  55                  60

    Ile Gly Asp Phe Cys Cys Asp Val Ile Val Cys Arg Gly Cys Gly Asn
     65                      70                  75                  80
```

```
Gln Asn Phe Ala Trp Arg Thr Glu Cys Asn Gln Cys Gly Asp Arg Gly
                85              90          Cys     95

Arg Gly Gly Pro Gly Gly Met Xaa Gly Gly Arg Gly Gly Leu Met Asp
            100         105                 110

Arg Gly Gly Pro Gly Gly Met Phe Arg Gly Gly Arg Gly Gly Asp Arg
        115             120             125

Gly Gly Phe Arg Gly Gly Arg Gly Met Asp Arg Gly Gly Phe Xaa Gly
    130             135             140

Gly Arg Arg Gly Gly Pro Gly Gly Pro Leu Asp Leu
145             150             155
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<210> 1512
<211> 102
<212> PRT
<213> Homo sapiens

<220>
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<220>
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<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1512

```
Pro Met Arg Arg Pro Arg Gly Glu Pro Ala Pro Gly Pro Arg Asp Arg
 1               5              10             15

Leu Arg Glu Arg Pro Ala Gln Gly Pro Gly Ser His Val Arg Val Ala
            20             25             30

Pro Leu Ala Thr Val Asn Ile Leu Xaa Ser Leu Cys Gln Leu Arg Cys
        35             40             45

Leu Pro Phe Xaa Ala Leu His Phe Val Xaa Ser Pro Gly Phe Ile Xaa
    50             55             60

Tyr Ile Ser Gly Thr Pro His Ala Leu Ile Val Arg Arg Tyr Leu Ser
65             70             75             80

Leu Leu Asp Thr Ala Val Glu Leu Xaa Leu Pro Arg Tyr Arg Gly Pro
            85             90             95

Arg Leu Pro Arg Xaa Gln
            100
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<210> 1513
<211> 139
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1513

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Glu Thr Glu Arg Gly Phe Glu Glu Leu Pro Leu Cys Ser Cys Arg Met
 1               5              10             15

Glu Ala Pro Lys Ile Asp Ser Ile Ser Glu Arg Ala Gly His Lys Cys
            20             25             30

Met Ala Thr Glu Ser Val Asp Gly Glu Leu Ser Gly Cys Asn Ala Ala
            35             40             45

Ile Leu Lys Arg Glu Thr Met Arg Pro Ser Ser Arg Val Ala Leu Met
    50             55             60

Val Leu Cys Glu Thr His Arg Ala Arg Met Val Lys His His Cys Cys
65             70             75             80
```

```
Pro Gly Cys Gly Tyr Phe Cys Thr Ala Gly Thr Phe Leu Glu Cys His
                85                  90                  95

Pro Asp Phe Arg Val Ala His Arg Phe His Lys Ala Cys Val Ser Gln
            100                 105                 110

Leu Asn Gly Met Val Phe Cys Pro His Cys Gly Glu Asp Thr Ser Glu
        115                 120                 125

Ala Gln Xaa Val Thr Ile Pro Gly Val Thr Gly
    130                 135
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```
<210> 1514
<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (23)
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<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
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<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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1581

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<221> SITE
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (53)
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<220>
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<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1514
Ile Arg His Glu Ser Ile Ser Gly Ala Ser Xaa Lys Asp Ile Val His
 1               5                   10                  15

Ser Gly Xaa Ala Tyr Thr Xaa Glu Xaa Ser Ala Arg Gln Xaa Met Arg
            20              25                  30

Thr Ala Met Lys Xaa Asn Leu Gly Xaa Asp Leu Arg Thr Ala Ser Tyr
            35              40              45

Xaa Asn Ala Ile Xaa Xaa Val Phe Lys Val Tyr Xaa Glu Ala Gly Val
    50              55              60

Thr Phe Thr Xaa M t Xaa His Gly
 65              70
```

```
<210> 1515
<211> 88
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1515
Leu Tyr Pro Pro Ala Cys Ser Ala Thr Arg Thr Pro Ser Thr Met Thr
 1               5                  10                  15

Thr Ser Ala Ser Ser His Leu Asn Lys Gly Ile Lys Gln Val Tyr Met
            20                  25                  30

Ser Leu Pro Gln Gly Glu Lys Val Gln Ala Met Tyr Ile Trp Ile Asp
        35                  40                  45

Gly Thr Gly Glu Gly Leu Arg Cys Lys Thr Arg Thr Leu Asp Ser Glu
    50                  55                  60

Pro Lys Cys Val Glu Glu Leu Pro Glu Trp Asn Phe Asp Gly Ser Ser
 65                  70                  75                  80

Thr Xaa Gln Ser Xaa Gly Ser Ser
                85
```

```
<210> 1516
<211> 105
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1516
Gly Arg Glu Ser Gln Asp Thr Xaa Phe Xaa Xaa Leu Val Glu Arg Val
 1   5   10   15

Ile Gln Gln Leu Glu Gly Ala Phe Ala Leu Xaa Phe Lys Ser Val His
            20   25   30

Phe Pro Gly Gln Ala Xaa Gly Thr Arg Arg Gly Ser Pro Leu Leu Ile
        35   40   45

Gly Val Arg Ser Glu His Lys Leu Ser Thr Asp His Ile Pro Ile Leu
    50   55   60

Tyr Arg Thr Gly Lys Asp Lys Lys Gly Ser Cys Asn Leu Ser Arg Val
65   70   75   80

Asp Ser Thr Thr Cys Leu Xaa Pro Xaa Glu Glu Lys Ala Xaa Glu Tyr
                85   90   95

Tyr Phe Ala Ser Asp Ala Xaa Ala Ala
            100   105

<210> 1517
<211> 121
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (33)
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<220>
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<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (72)
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<220>
<221> SITE

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<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1517
Gly Xaa Glu Lys Arg Glu Arg Glu Arg Glu Arg Leu Val Ile Arg Gln
 1           5               10              15

Xaa Pro Xaa Val Gln Xaa Leu Gln Ala Tyr Lys Pro Arg Glu Asn Asp
            20              25              30

Xaa Leu Ala Leu Glu Lys Ala Asp Val Val Met Val Thr His Gln Ser
            35              40              45

Ser Ala Arg Leu Ala Gly Gly Arg Glu Ala Leu Arg Arg Gly Ala Arg
     50              55              60

Leu Val Ser Cys Asp Ser Xaa Xaa Ser Ser Phe Pro Thr Gln Arg Ser
 65              70              75              80

Val Thr Gln Asn Leu Lys Gly Ser Phe Ile Glu Cys Lys Thr Cys Gln
             85              90              95

Thr Thr Ala Xaa Gly Asn Ser Lys Pro Xaa Phe Ser Xaa Xaa Glu Gly
             100             105             110

Val Phe Val Ser Trp Lys Asn Lys Leu
         115             120


<210> 1518
<211> 146
<212> PRT
<213> Homo sapiens

<220>
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<221> SITE
<222> (71)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (138)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1518
Arg Gly Pro Ala Gln Arg Gly Glu Gly Ala Arg Glu Ala Asn Lys Lys
 1               5                   10                  15

Ile Glu Lys Gln Leu Gln Lys Asp Lys Gln Val Tyr Arg Ala Thr His
            20                  25                  30

Arg Leu Leu Leu Leu Gly Ala Gly Glu Ser Gly Lys Ser Thr Ile Val
            35                  40                  45

Lys Gln Met Arg Ile Leu His Val Asn Gly Phe Asn Gly Asp Ser Glu
    50                  55                  60

Lys Ala Thr Lys Val Gln Xaa Ile Lys Asn Asn Leu Lys Glu Ala Ile
    65                  70                  75                  80

Glu Thr Ile Val Ala Ala Met Ser Asn Leu Val Pro Pro Val Glu Leu
                85                  90                  95

Ala Asn Pro Glu Asn Gln Phe Arg Val Asp Tyr Ile Leu Ser Val Met
            100                 105                 110

Asn Val Pro Asp Phe Xaa Phe Pro Pro Glu Phe Tyr Glu His Ala Lys
            115                 120                 125

Ala Leu Trp Xaa Asp Glu Xaa Val Arg Xaa Cys Tyr Glu Arg Ser Asn
    130                 135                 140
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```
Glu Tyr
145


<210> 1519
<211> 137
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1519
Asp Ser Gln Arg Gln Ala Thr Lys Asp Ala Gly Val Ile Ala Gly Leu
 1               5                  10                  15

Asn Val Leu Arg Ile Ile Asn Glu Pro Thr Ala Ala Ala Ile Ala Tyr
                20                  25                  30

Gly Leu Asp Arg Thr Gly Lys Gly Glu Arg Asn Val Leu Ile Phe Asp
            35                  40                  45

Leu Gly Gly Gly Thr Phe Asp Val Ser Ile Leu Thr Ile Asp Asp Gly
        50                  55                  60

Ile Phe Glu Val Lys Ala Thr Xaa Gly Asp Thr His Leu Gly Gly Glu
65                  70                  75                  80

Asp Phe Asp Asn Arg Leu Val Asn His Phe Val Glu Glu Phe Lys Arg
                85                  90                  95

Lys His Lys Lys Asp Ile Ser Gln Asn Lys Arg Ala Val Arg Arg Leu
            100                 105                 110

Arg Thr Ala Ala Arg Gly Pro Arg Gly Pro Cys Arg Pro Ala Pro Arg
            115                 120                 125

Pro Ala Trp Arg Ser Thr Ser Leu Phe
        130                 135


<210> 1520
<211> 100
<212> PRT
<213> Homo sapiens
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1588

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<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1520
Cys Arg Lys Ser Ser Trp Lys Arg Trp Trp Pro Gln Ser Lys Leu Xaa
  1               5                  10                  15

Thr Arg Xaa Ile Val Thr Ile Gly Ile Lys Ala Met Ala Thr Met Asp
            20                  25                  30

Ile Thr Ala Lys Val Thr Val Val Met Glu Asp Met Xaa Tyr Thr Gly
            35                  40                  45

Tyr Asn Asn Tyr Tyr Gly Tyr Gly Asp Tyr Ser Asn Gln Gln Ser Gly
        50                  55                  60

Tyr Gly Lys Val Ser Arg Arg Gly Gly His Gln Asn Ser Tyr Lys Pro
 65                  70                  75                  80

Tyr Leu Asn Tyr Ser Ile Cys Asn Leu Ser Pro Thr Gly Gly Glu Ala
                85                  90                  95

Tyr Phe Xaa Ile
            100



<210> 1521
<211> 129
<212> PRT
<213> Homo sapiens

<220>
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<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1521
Asp Ala Trp Ala Leu Ala Pro Gly Pro Val Leu Phe Ser Asn Met Val
 1   5   10   15

Cys Leu Lys Phe Pro Gly Ser Ser Cys Met Ala Ala Leu Thr Val Thr
            20   25   30

Leu Met Val Leu Asn Ser Pro Leu Ala Leu Ala Gly Asp Thr Arg Pro
            35   40   45

Arg Phe Leu Glu Gln Val Lys His Glu Cys His Phe Phe Asn Gly Thr
    50   55   60

Glu Arg Val Arg Phe Leu Asp Xaa Tyr Phe Tyr His Gln Glu Glu Tyr
65   70   75   80

Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr Xaa Leu
            85   90   95

Gly Arg Pro Asn Ser Glu Tyr Trp Asn Ser Gln Lys Asp Xaa Xaa Asp
            100   105   110

Arg Ser Gly Pro Arg Trp Thr Pro Thr Ala Xaa Thr Leu Arg Gly Trp
            115   120   125

Val

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<210> 1522
<211> 113
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1522
Xaa Xaa Thr Asp Ser Xaa Arg Pro Asp Ser Arg Val Asp Pro Arg Val
 1               5                  10                  15

Arg Glu Val Thr Asp Tyr Ala Ile Ala Arg Arg Ile Val Asp Leu His
             20                  25                  30

Ser Arg Ile Glu Glu Ser Ile Xaa Asn Ile Tyr Xaa Leu Asp Asp Ile
         35                  40                  45

Arg Arg Tyr Leu Xaa Tyr Ala Arg Lys Xaa Lys Pro Lys Asn Ser Lys
     50                  55                  60

Xaa Ser Xaa Asp Phe Ile Val Glu Gln Xaa Lys His Leu Arg Pro Xaa
 65                  70                  75                  80

Asp Gly Phe Trp Ser Ser Pro Val Phe Xaa Glu Gly Xaa Ser Cys Gly
                 85                  90                  95

Xaa Ile Glu Gly L u Gly Ser Val Ser Leu Gly Ser Gln Xaa Leu Arg
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1592

                    100   105   110

Val

<210> 1523
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1523
Pro Cys Lys Gly Ser Ile Ile Thr Trp Ser Leu Ile Arg Asp Leu Xaa
  1   5   10   15

Glu Trp Leu His Glu Gly Gln Leu Ala Leu Thr Phe Asn Gln Xaa Asn
            20   25   30

<210> 1524
<211> 28
<212> PRT
<213> Homo sapiens

<400> 1524
Pro Cys Lys Gly Ser Ile Ile Thr Cys Ser Leu Asn Arg Asp Leu Tyr
  1   5   10   15

Glu Trp Leu His Glu Gly Ser Ala Val Ser Tyr Phe
            20   25

<210> 1525
<211> 92
<212> PRT

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<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (6)
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<220>
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<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1525
Xaa Glu Gln Lys Leu Xaa Leu His Arg Gly Gly Gly Arg Ser Arg Thr
 1               5                  10                  15
```

1594

```
Ser Gly Ser Pro Xaa Leu Xaa Glu Phe Gly Thr Ser Gly Thr Arg Pro
            20              25              30

Cys Gly Val Tyr Thr Pro Arg Cys Gly Ser Gly Leu Leu Cys Tyr Pro
            35              40              45

Pro Arg Gly Val Glu Lys Pro Leu His Thr Leu Met His Gly Gln Gly
    50              55              60

Val Cys Met Glu Leu Ala Xaa Ile Glu Ala Xaa Xaa Glu Ser Leu Xaa
65              70              75              80

Pro Ser Asp Lys Asp Glu Gly Asp His Pro Asn Xaa
                85              90
```

```
<210> 1526
<211> 154
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1526
Xaa Glu Pro Ser Pro Gly Ile Phe Arg Trp Phe His Leu Val Asn Arg
 1           5              10              15

Thr Glu Gln Arg Glu Leu Thr Met Glu Phe Gly Leu Ser Trp Leu Phe
            20              25              30

Leu Val Ala Ile Leu Lys Gly Val Gln Cys Glu Val Gln Leu Val Glu
            35              40              45

Ser Gly Gly Gly Leu Val Gln Pro Gly Gly Ser Leu Arg Leu Ser Cys
    50              55              60

Thr Val Ser Gly Phe Thr Phe Arg Asn Tyr Ala Met Ser Trp Val Arg
65              70              75              80

Gln Gly Pro Gly Lys Gly Leu Glu Trp Val Ser Ala Ile Asp Gly Ser
                85              90              95
```

1595

```
Gly Tyr Asn Thr Tyr Tyr Glu Arg Ser Leu Gln Gly Arg Phe Ser Val
            100             105             110

Ser Arg Asp Asn Ser Xaa Asn Thr Leu Tyr Leu Gln Met Asn Ser Leu
        115             120             125

Gly Ala Glu Asp Thr Ala Ile Tyr Tyr Cys Ala Lys Thr Glu Arg Met
    130             135             140

Gly Thr Gly Trp Tyr Gly Arg Asn Asp Tyr
145             150
```

<210> 1527
<211> 135
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (133)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1527
```
Gly Lys Leu Val Arg Leu Gln Val Pro Val Arg Asn Ser Arg Val Asp
 1               5               10              15

Pro Arg Val Arg Thr Val Thr Pro Gly Glu Thr Ala Ser Ile Ser Cys
            20              25              30

Arg Ser Ser Gln Thr Leu Leu His Val Asn Gly His Asn Tyr Leu Asp
        35              40              45

Trp Tyr Met Gln Lys Pro Gly Gln Pro Pro Gln Leu Val Val Tyr Arg
    50              55              60
```

```
Gly Ser Asn Arg Ala Ser Gly Val Pro Asp Arg Ph  Ser Gly Gly Gly
65              70          75              80

Ser Gly Thr Asp Phe Thr Leu Arg Ile Thr Thr Val Glu Ala Xaa Asp
                85          90              95

Val Gly Val Tyr Tyr Cys Met Gln Ala Leu Gln Ser Pro Tyr Thr Phe
            100             105             110

Gly Gln Gly Thr Lys Leu Glu Ile Lys Arg Thr Val Gly Cys Thr Ile
        115             120             125

Xaa Leu His Leu Xaa Xaa Ile
    130             135
```

<210> 1528
<211> 139
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1528
```
Arg Glu Gln Lys Leu Glu Leu His Arg Gly Gly Gly Arg Ser Arg Thr
1               5           10              15

Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Ser Gly Trp Ala Leu
            20          25              30

Arg Ile Ser Arg Phe Leu Pro Gly Phe His Ser Phe Ala Pro Cys Thr
            35          40              45

Val Ala Pro Ser Leu Arg Ala Gln Pro Ala Lys Gln Arg Ala Pro Val
        50          55              60

Ala Gly Val Met Gln Arg Ala Arg Pro Thr Leu Trp Ala Ala Ala Leu
65              70          75              80

Thr Leu Leu Val Leu L u Arg Gly Pro Pro Val Ala Arg Ala Gly Ala
                85          90              95
```

Ser Ser Gly Gly Leu Gly Pro Val Val Arg Cys Glu Pro Cys Asp Ala
            100   105   110

Arg Ala Leu Ala Xaa Cys Ala Pro Ser Ala Arg Arg Val Arg Arg Asn
            115   120   125

Leu Val Arg Gln Ala Gly Leu Ala Xaa Ala Ala
            130   135

<210> 1529
<211> 135
<212> PRT
<213> Homo sapiens

<400> 1529
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Ile Asp Asp Thr Asn
  1   5   10   15

Ile Thr Arg Leu Gln Leu Glu Thr Glu Ile Glu Ala Leu Lys Glu Glu
            20   25   30

Leu Leu Phe Met Lys Lys Asn His Glu Glu Glu Val Lys Gly Leu Gln
            35   40   45

Ala Gln Ile Ala Ser Ser Gly Leu Thr Val Glu Val Asp Ala Pro Lys
        50   55   60

Ser Gln Asp Leu Ala Lys Ile Met Ala Asp Ile Arg Ala Gln Tyr Asp
65   70   75   80

Glu Leu Ala Arg Lys Asn Arg Glu Glu Leu Asp Lys Tyr Trp Ser Gln
            85   90   95

Gln Ile Glu Glu Ser Thr Thr Val Val Thr Thr Gln Ser Ala Glu Val
            100   105   110

Gly Ala Ala Glu Thr Thr Leu Thr Glu Leu Arg Arg Thr Val Gln Ser
            115   120   125

Leu Glu Ile Asp Leu Gly Leu
            130   135

<210> 1530
<211> 132
<212> PRT
<213> Homo sapiens

<400> 1530
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Gln Val Pro Ala Arg
 1   5   10   15

Lys Lys Arg Pro Lys Arg Leu Arg Thr Gly Asn Met Val Arg Ser Gly
                20   25   30

Asn Lys Ala Ala Val Val Leu Cys Met Asp Val Gly Phe Thr Met Ser
            35   40   45

Asn Ser Ile Pro Gly Ile Glu Ser Pro Phe Glu Gln Ala Lys Lys Val
        50   55   60

Ile Thr Met Phe Val Gln Arg Gln Val Phe Ala Glu Asn Lys Asp Glu
65   70   75   80

Ile Ala Leu Val Leu Phe Gly Thr Asp Gly Thr Asp Asn Pro Leu Ser
                85   90   95

Gly Gly Asp Gln Tyr Gln Asn Ile Thr Val His Arg His Leu Met Leu
            100   105   110

Pro Asp Phe Asp Leu Leu Glu Asp Ile Glu Lys Gln Asn Pro Thr Arg
            115   120   125

Phe Ser Thr Gly
    130

<210> 1531
<211> 94
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1531
Arg Lys Arg Leu Lys Gly Glu Glu Gln Lys Leu Leu Arg Asn Ala Arg
 1           5              10              15

Arg Xaa Gln Lys Met Ala Cys Gln Met Thr Xaa Asn His Ser Ser Val
         20              25              30

Ser Xaa Leu Lys Gly Ser Ser Leu Gln Asp Arg Arg Ala Ser Arg Phe
         35              40              45

Leu Ile Lys Ser Val Gln Lys Ser Ser Gly Val Gln Xaa Asp Pro Ser
     50              55              60

Ser Ser Ile Ser Xaa Pro Ser Leu Thr Ala Xaa Trp Ser Xaa Leu Pro
 65              70              75              80

Trp His Leu Arg Gly Pro Lys Ala Ala Lys Thr Leu Lys Xaa
                 85              90


<210> 1532
<211> 153
<212> PRT
<213> Homo sapiens
```

<400> 1532

```
Gln Thr Thr Met Cys Tyr Gly Lys Cys Ala Arg Cys Ile Gly His Ser
 1               5                10                15

Leu Val Gly Leu Ala Leu Leu Cys Ile Ala Ala Asn Ile Leu Leu Tyr
             20                25                30

Phe Pro Asn Gly Glu Thr Lys Tyr Ala Ser Glu Asn His Leu Ser Arg
         35                40                45

Phe Val Trp Phe Phe Ser Gly Ile Val Gly Gly Gly Leu Leu Met Leu
         50                55                60

Leu Pro Ala Phe Val Phe Ile Gly Leu Glu Gln Asp Asp Cys Cys Gly
 65                70                75                80

Cys Cys Gly His Glu Asn Cys Gly Lys Arg Cys Ala Met Leu Ser Ser
                 85                90                95

Val Leu Ala Ala Leu Ile Gly Ile Ala Gly Ser Gly Tyr Cys Val Ile
             100               105               110

Val Ala Ala Leu Gly Leu Ala Glu Gly Pro Leu Cys Leu Asp Ser Leu
         115               120               125

Gly Gln Trp Asn Tyr Thr Phe Ala Ser Thr Glu Gly Gln Val Pro Ser
     130               135               140

Gly Tyr Leu His Met Val Arg Val His
145               150
```

<210> 1533
<211> 142
<212> PRT
<213> Homo sapiens

<400> 1533

```
Leu Cys Leu Leu Arg Thr Thr Val Thr Glu Val Ser Arg Ala Phe Ser
 1               5                10                15

Leu Leu Cys Lys Met Ala Thr Leu Lys Glu Lys Leu Ile Ala Pro Val
             20                25                30

Ala Glu Glu Glu Ala Thr Val Pro Asn Asn Lys Ile Thr Val Val Gly
         35                40                45

Val Gly Gln Val Gly Met Ala Cys Ala Ile Ser Ile Leu Gly Lys Ser
     50                55                60
```

```
Leu Ala Asp Glu Leu Ala Leu Val Asp Val Leu Glu Asp Lys Leu Lys
65                  70              75              80

Gly Glu Met Met Asp Leu Gln His Gly Ser Leu Phe Leu Gln Thr Pro
                85              90              95

Lys Ile Leu Ala Asp Lys Asp Tyr Ser Val Thr Ala Asn Ser Lys Ile
            100             105             110

Val Val Val Thr Ala Gly Val Arg Gln Gln Glu Gly Glu Ser Arg Leu
        115             120             125

Asn Leu Val Gln Arg Asn Val Asn Val Phe Lys Phe Ile Ile
    130             135             140
```

<210> 1534
<211> 67
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1534
```
Ala His Cys His Ala Pro Pro Thr Thr Ala Arg Arg Ala Phe Pro Ile
1               5               10              15

Pro Phe Gly Ser Lys Ser Asn Met Ala Thr Leu Lys Asp Gln Leu Ile
            20              25              30

Tyr Asn Leu Leu Lys Glu Glu Gln Thr Xaa Gln Asn Lys Ile Thr Xaa
        35              40              45
```

```
Val Gly Val Gly Ala Xaa Gly Met Ala Cys Ala Ile Xaa Ile Leu Met
     50                  55                  60

Lys Asp Leu
 65
```

```
<210> 1535
<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1535
Xaa Lys Lys Tyr Leu Gly Asp Xaa Ile Glu Gly Thr Pro Ala Gly Thr
 1               5                  10                  15

Gly Pro Glu Phe Pro Gly Leu Leu Thr Cys Leu Leu Gln Leu Ile Met
             20                  25                  30

Val Thr Asn Lys Ala Ile Ala Ser Gln Ile Ser Gln Ile Lys His Phe
         35                  40                  45

Phe His Cys Ile Leu Val Val Val Cys Pro Asn Ser Ser Met Tyr Leu
     50                  55                  60

Ile Met Ser Gly Ser Ile Leu His
 65                  70
```

```
<210> 1536
<211> 80
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1536
Gly Lys Ala Trp Gly Ser Glu Cys Glu Lys Cys Pro Leu Pro Gly Thr
 1               5                  10                  15

Glu Ala Phe Xaa Glu Ile Cys Pro Ala Gly His Gly Tyr Thr Tyr Ala
            20              25                  30

Ser Ser Asp Ile Arg Leu Ser Met Arg Lys Ala Glu Xaa Glu Glu Leu
            35              40                  45

Ala Xaa Pro Pro Arg Glu Gln Gly Gln Xaa Ser Ser Trp Ala Leu Pro
    50              55                  60

Gly Pro Thr Xaa Lys Gln Pro Leu Arg Val Arg His Gly His Leu Ala
65              70                  75                  80
```

```
<210> 1537
<211> 137
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1537
Arg Lys Gln Cys Gln Asp Ser Lys Asp Ser Asn His Leu Pro Lys Met
 1               5                  10                  15


Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr Ser
             20                  25                  30


Gly Gln Tyr Tyr Asp Tyr Asp Phe Pro Leu Ser Ile Tyr Gly Gln Ser
         35                  40                  45


Ser Pro Asn Cys Ala Pro Glu Cys Asn Xaa Pro Glu Ser Tyr Pro Ser
     50                  55                  60


Ala Met Tyr Cys Asp Glu Leu Lys Leu Xaa Ser Val Pro Met Val Pro
65                  70                  75                  80


Pro Gly Ile Lys Tyr Leu Tyr Leu Arg Asn Asn Gln Ile Asp His Ile
                 85                  90                  95


Asp Glu Lys Ala Phe Glu Asn Val Thr Asp Leu Gln Trp Leu Ile Leu
             100                 105                 110


Asp His Asn Leu Leu Glu Asn Ser Lys Xaa Lys Gly Arg Val Phe Ser
             115                 120                 125
```

```
Lys Leu Lys Gln Leu Xaa Lys Xaa Xaa
    130                 135
```

```
<210> 1538
<211> 144
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1538
Tyr Gln Val Tyr Ser Lys Ile Gln Ala Thr Asn Thr Trp Leu Phe Leu
  1               5                   10                  15

Ser Ser Cys Asn Gly Asn Glu Thr Ser Leu Trp Asp Cys Lys Asn Trp
            20                  25                  30

Gln Trp Gly Gly Leu Thr Cys Asp His Tyr Glu Glu Ala Lys Ile Thr
            35                  40                  45

Cys Ser Ala His Arg Glu Pro Arg Leu Val Gly Gly Asp Ile Pro Cys
        50                  55                  60

Ser Gly Arg Val Glu Val Lys His Gly Asp Thr Trp Gly Ser Ile Cys
 65                 70                  75                  80

Asp Ser Asp Phe Ser Leu Glu Ala Ala Ser Val Leu Cys Arg Glu Leu
                85                  90                  95

Gln Cys Gly Thr Val Val Ser Ile Leu Gly Gly Ala His Phe Gly Glu
            100                 105                 110

Gly Met Asp Arg Ser Gly Leu Lys Asn Ser Ser Val Glu Gly His Glu
            115                 120                 125

Ser Pro Ser Phe Ile Xaa Pro Val Xaa Thr Pro Pro Lys Arg Asn Leu
        130                 135                 140
```

1606

```
<210> 1539
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1539
Asn Met Ala Gly Val Glu Glu Val Ala Ala Ser Gly Ser His Leu Asn
 1               5                  10                  15

Gly Asp Leu Asp Pro Asp Asp Arg Glu Glu Gly Ala Ala Ser Thr Ala
            20                  25                  30

Glu Glu Xaa Ala Lys Lys Lys Arg Arg Lys Lys Lys Lys Ser Lys Gly
            35                  40                  45

Pro Ser Ala Gly Lys Glu Ser Phe Met Phe Ser Gln Ser Pro Pro Gly
     50                  55                  60

Thr Ala Glu Leu Phe Gly Ser Gly Pro Leu Arg Gly Pro Gly Pro Gly
 65                  70                  75                  80

Pro Gln Ser Pro Asp
               85
```

```
<210> 1540
<211> 36
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1540
Gly Val Gly Phe Arg Glu Gly Thr Xaa Gly Ala Gln Thr Gln Arg Ile
 1   5   10   15

Arg Xaa Arg Val Pro Xaa Asn Trp Lys Met Xaa Phe Glu Pro Ile Ser
            20   25   30

Ser Thr Lys Phe
            35

<210> 1541
<211> 144
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

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<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (132)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1541
Arg Thr Xaa Ala Xaa Gly Glu Arg Ala Cys Arg Ser Thr Leu Val Asp
 1           5                  10                  15

Pro Lys Xaa Val Xaa Thr Val Phe Ser Leu Gly Ala Cys Met Glu Gly
            20                  25                  30

Leu Asn Ile Leu Leu Asn Arg Leu Leu Gly Ile Ser Leu Tyr Ala Glu
            35                  40                  45

Gln Pro Ala Lys Gly Glu Val Trp Ser Glu Asp Val Arg Lys Leu Ala
        50                  55                  60

Val Val His Glu Ser Glu Gly Leu Leu Gly Tyr Ile Tyr Cys Asp Phe
 65                  70                  75                  80

Phe Gln Arg Ala Asp Lys Pro His Gln Asp Cys His Phe Thr Ile Arg
                85                  90                  95

Gly Gly Arg Leu Lys Gly Arg Trp Glu Thr Xaa Gln Leu Pro Val Val
            100                 105                 110

Ser Ser Tyr Ala Gly Ile Phe Pro Val Pro Xaa Arg Glu Phe Ser Asn
            115                 120                 125

Phe Gly Xaa Xaa Leu Gly Met Met Gly Lys Pro Phe Pro Gly Xaa Gly
    130                 135                 140
```

1609

```
<210> 1542
<211> 145
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1542
Ala Glu Arg Thr Pro Cys Arg Arg Pro Ala Glu Met Leu Arg Leu Pro
 1               5                  10                  15

Thr Val Phe Arg Gln Met Arg Pro Val Ser Arg Val Leu Ala Pro His
            20                  25                  30

Leu Thr Arg Ala Tyr Ala Lys Xaa Val Lys Phe Gly Ala Asp Ala Arg
            35                  40                  45

Ala Leu Met Leu Gln Gly Val Asp Leu Leu Ala Asp Ala Val Ala Val
        50                  55                  60

Thr Met Gly Pro Lys Gly Arg Thr Val Ile Ile Glu Gln Ser Trp Gly
65                  70                  75                  80

Ser Pro Lys Val Thr Lys Asp Gly Val Thr Val Ala Lys Ser Ile Asp
                85                  90                  95

Leu Lys Asp Lys Tyr Lys Asn Ile Gly Ala Lys Leu Val Gln Asp Val
            100                 105                 110

Ala Asn Asn Thr Asn Glu Glu Ala Gly Asp Gly Thr Thr Thr Ala Thr
            115                 120                 125

Val Leu Ala Arg Ser Ile Ala Lys Glu Gly Phe Glu Lys Ile Ser Lys
        130                 135                 140

Gly
145



<210> 1543
<211> 135
<212> PRT
<213> Homo sapiens

<400> 1543
Lys Phe Gly Ala Asp Ala Arg Ala Leu M t Leu Gln Gly Val Asp Leu
 1               5                  10                  15
```

```
Leu Ala Asp Ala Val Ala Val Thr Met Gly Pro Lys Gly Arg Thr Val
            20          25              30

Ile Ile Glu Gln Ser Trp Gly Ser Pro Lys Val Thr Lys Asp Gly Val
            35          40              45

Thr Val Ala Lys Ser Ile Asp Leu Lys Asp Lys Tyr Lys Asn Ile Gly
    50              55              60

Ala Lys Leu Val Gln Asp Val Ala Asn Asn Thr Asn Glu Glu Ala Gly
65              70              75              80

Asp Gly Thr Thr Thr Ala Thr Val Leu Ala Arg Ser Ile Ala Lys Glu
            85              90              95

Gly Phe Glu Lys Ile Ser Lys Gly Ala Asn Pro Val Glu Ile Arg Arg
            100             105             110

Gly Val Met Leu Ala Val Asp Ala Val Ile Ala Glu Leu Lys Lys Gln
    115             120             125

Ser Lys Pro Val Thr Thr Pro
    130             135
```

<210> 1544
<211> 84
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<400> 1544
Cys Glu Phe Lys Arg Val Pro Gln Cys Pro Ser Gly Arg Val Tyr Val
1               5                   10                  15


Leu Lys Phe Lys Ala Gly Ser Lys Arg Leu Phe Phe Trp Met Gln Glu
            20                  25                  30


Pro Lys Thr Asp Gln Asp Glu Glu His Cys Arg Lys Val Asn Glu Leu
            35                  40                  45


Ser Gly Thr Thr Pro Arg Cys Leu Gly His Trp Gly Pro Ala Glu Gln
        50                  55                  60


Arg Pro Arg Xaa Leu Cys Ala Xaa Arg Leu Arg Trp Xaa Ala Glu Xaa
65                  70                  75                  80


Ala Gly Glu Thr
```

```
<210> 1545
<211> 22
<212> PRT
<213> Homo sapiens
```

```
<400> 1545
Tyr Leu Arg Leu Ile Tyr Ser Thr Ser Ile Thr Leu Leu Pro Ile Ser
1               5                   10                  15


Asn Asn Val Lys Ile Lys
                20
```

```
<210> 1546
<211> 112
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids
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1612

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<400> 1546
Pro Ser Ala Ala Ala Gly Asp Leu Gln Arg Thr Ala Ala Met Gly Ala
 1               5                  10                  15


His Leu Val Arg Arg Tyr Leu Gly Asp Ala Ser Val Xaa Pro Asp Pro
                20                  25                  30


Leu Gln Met Pro Thr Phe Pro Pro Asp Tyr Gly Phe Pro Glu Arg Lys
            35                  40                  45


Xaa Arg Xaa Met Val Ala Thr Xaa Xaa Xaa Met Met Asp Ala His Xaa
        50                  55                  60


Ser Ser Xaa Cys Gly Xaa Thr Ala Pro Thr Asn Ser Ser Gly Cys Ser
65                  70                  75                  80


Ile Xaa Thr Leu Xaa Leu Pro Pro Leu Pro Trp Leu Ala Asn Gln Glu
                85                  90                  95


Arg Asp Lys Xaa Glu Xaa Xaa Gln Thr Pro Xaa Xaa Phe Xaa Xaa Pro
                100                 105                 110
```

<210> 1547
<211> 142
<212> PRT
<213> Homo sapiens

<400> 1547

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Lys Val Ser Ala Val Met Ala Phe Leu Ala Ser Gly Pro Tyr Leu Thr
 1               5                  10                  15

His Gln Gln Lys Val Leu Arg Leu Tyr Lys Arg Ala Leu Arg His Leu
             20                  25                  30

Glu Ser Trp Cys Val Gln Arg Asp Lys Tyr Arg Tyr Phe Ala Cys Leu
         35                  40                  45

Met Arg Ala Arg Phe Glu Glu His Lys Asn Glu Lys Asp Met Ala Lys
     50                  55                  60

Ala Thr Gln Leu Leu Lys Glu Ala Glu Glu Phe Trp Tyr Arg Gln
65                  70                  75                  80

His Pro Gln Pro Tyr Ile Phe Pro Asp Ser Pro Gly Gly Thr Ser Tyr
                 85                  90                  95

Glu Arg Tyr Asp Cys Tyr Lys Val Pro Glu Trp Cys Leu Asp Asp Trp
            100                 105                 110

His Pro Ser Glu Lys Ala Met Tyr Pro Asp Tyr Phe Ala Lys Arg Glu
            115                 120                 125

Gln Trp Lys Lys Leu Arg Glu Gly Lys Leu Gly Thr Arg Gly
        130                 135                 140
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<210> 1548
<211> 98
<212> PRT
<213> Homo sapiens

<220>
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<220>

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<222> (82)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1548
Leu Tyr Tyr Xaa Leu Gly Phe Leu Xaa Leu Xaa Xaa Arg Leu Pro Leu
  1           5                  10                  15

Asp Ala Ala Lys Arg Xaa His Asp Glu Leu Gly Asn Glu Arg Pro Xaa
             20                  25                  30

Ala Tyr Met Xaa Glu His Asn Gln Leu Asn Gly Trp Xaa Ser Asp Glu
         35                  40                  45

Asn Asp Trp Asn Glu Lys Leu Tyr Pro Val Trp Lys Arg Xaa Asp Met
     50                  55                  60

Xaa Xaa Glu Lys Leu Leu Glu Gly Arg Pro Val Cys Lys Ala Val Leu
 65                  70                  75                  80

Thr Xaa Asp Xaa Pro Thr Leu Gly Gly Leu Lys Xaa Asn Ile Xaa Arg
                 85                  90                  95

Xaa Thr

<210> 1549
<211> 138
<212> PRT
<213> Homo sapiens
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<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1549
Gly Cys Ser Leu Glu Gln Arg Ser Phe Ile Ser Val Arg Leu Leu Ser
 1               5                  10                  15

Tyr Leu Ser Ala Cys Arg His Pro Met Glu Asp Ser Met Asp Met Asp
             20                  25                  30

Met Ser Pro Leu Arg Pro Gln Asn Tyr Leu Phe Gly Cys Glu Leu Lys
             35                  40                  45

Ala Asp Lys Asp Tyr His Phe Lys Val Asp Asn Xaa Glu Asn Glu His
        50                  55                  60

Gln Leu Ser Leu Arg Thr Val Xaa Xaa Gly Ala Gly Ala Lys Asp Glu
    65                  70                  75                  80
```

```
Leu His Ile Val Glu Ala Glu Ala Met Asn Tyr Glu Gly Ser Pro Ile
                85                  90                  95

Lys Val Thr Leu Ala Thr Leu Lys Met Ser Val Gln Pro Thr Val Phe
                100                 105                 110

Pro Leu Gly Ala Leu Asn Asn Thr Thr Xaa Xaa Leu Lys Val Glu Xaa
            115                 120                 125

Trp Phe Arg Ala Met Pro Ile Xaa Gly Gln
    130                 135
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<210> 1550
<211> 51
<212> PRT
<213> Homo sapiens

<400> 1550
```
Thr Leu Ala Phe Phe Leu Ile Pro Cys Ile Gly Ser Pro Ala Cys Pro
 1               5                  10                  15

Thr Met Ser Asp Ala Ala Val Asp Thr Ser Ser Glu Ile Thr Thr Lys
                20                  25                  30

Asp Leu Lys Glu Lys Lys Glu Val Val Glu Glu Ala Glu Met Glu Glu
            35                  40                  45

Thr Pro Cys
    50
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<210> 1551
<211> 73
<212> PRT
<213> Homo sapiens

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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1551
Lys Ala Xaa Ser Val Xaa Leu Tyr Lys Val Arg Leu Gln Val Pro Val
 1   5   10   15

Arg Asn Ser Arg Val Asp Pro Arg Val Arg Xaa Gly Gly Glu Gln Val
            20   25   30

Ser Ser Thr Ile Xaa Gly Leu Ser Gly Pro Pro Ser Arg Arg Gly Pro
            35   40   45

Phe Pro Leu Ala Trp Val Ile Leu Phe Leu Leu Glu Ala Gln Xaa Gly
        50   55   60

Pro Trp Xaa Leu Leu Pro Ser Ala His
 65   70

<210> 1552
<211> 131
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

1620

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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
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<400> 1552
Asn Ser Ala Xaa Xaa Glu Leu Leu Thr Gln Pro Gly Asp Trp Thr Leu
 1               5                  10                  15


Phe Val Pro Thr Asn Asp Ala Phe Lys Gly Met Thr Ser Glu Glu Lys
                20                  25                  30


Glu Ile Leu Ile Arg Asp Lys Asn Ala Leu Gln Asn Ile Ile Leu Tyr
            35                  40                  45


His Leu His Gln Glu Phe Ser Leu Glu Lys Asp Leu Asn Leu Val Leu
        50                  55                  60


Leu Thr Phe Leu Lys Thr Thr Gln Gly Ser Lys Ile Phe Leu Glu Gly
 65                  70                  75                  80
```

```
Ser Glu Met Val Thr Leu Leu Val Asn Gly Phe Gly Asn Pro Lys Xaa
                 85                  90                  95


Ser Asp Ile His Gly Pro Pro Xaa Val Val Ile Ser Cys Cys Arg Leu
                100                 105                 110


Asn Xaa Xaa Phe Pro Ala Xaa Thr Pro Phe Gly Xaa Gly Ser Thr Gly
        115                 120                 125


Xaa Asp Thr
    130




<210> 1553
<211> 106
<212> PRT
<213> Homo sapiens


<220>
<221> SITE
<222> (3)
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<220>
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<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids


<400> 1553
Trp Ile Xaa Arg Ala Ala Gly Ile Arg His Glu Val Ala Asp Thr Met
 1               5                  10                  15


Leu Pro Pro Met Ala Leu Pro Ser Val Ser Trp Met Leu Leu Ser Cys
                20                  25                  30


Leu Met Leu Leu Ser Gln Val Gln Gly Glu Glu Pro Gln Arg Glu Leu
        35                  40                  45


Pro Ser Ala Arg Ile Arg Xaa Pro Lys Gly Ser Lys Ala Tyr Gly Ser
```

```
        50                    55                    60

His Cys Tyr Ala Leu Phe Leu Ser Pro Lys Ser Trp Thr Asp Ala Asp
65              70              75              80

Leu Ala Cys Gln Lys Arg Pro Ser Gly Asn Leu Val Ser Xaa Leu Ser
            85              90              95

Gly Ala Glu Gly Ser Phe Xaa Pro Pro Trp
            100             105
```

<210> 1554
<211> 117
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1554
```
Ala Thr Phe Pro Arg Glu Trp Leu Cys Asp Arg His Leu Arg Glu Lys
 1               5               10              15

Met Phe Ser Ser Val Ala His Leu Ala Arg Ala Asn Pro Phe Asn Thr
            20              25              30

Pro His Leu Gln Leu Val His Asp Gly Leu Gly Asp Leu Arg Ser Ser
        35              40              45

Ser Pro Gly Pro Thr Gly Gln Pro Arg Arg Pro Arg Asn Leu Ala Ala
    50              55              60

Ala Ala Val Glu Glu Gln Tyr Ser Cys Asp Tyr Gly Ser Gly Arg Phe
65              70              75              80

Phe Ile Leu Cys Gly Leu Gly Gly Ile Ile Ser Cys Gly Thr Thr His
            85              90              95

Thr Ala Leu Val Pro Leu Asp Leu Val Lys Cys Arg Xaa Arg Phe Val
            100             105             110

Phe Ala Cys Trp Thr
        115
```

<210> 1555

<211> 164
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (79)
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<220>
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<220>
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<400> 1555
Glu Lys Lys Val Glu Arg Gln Thr Glu Leu Lys Arg Lys Phe Glu Gln
 1   5   10   15

Met Lys Gln Asp Arg Ile Thr Arg Tyr Gln Gly Val Asn Leu Tyr Val
            20   25   30

Lys Asn Leu Asp Asp Gly Ile Asp Asp Glu Arg Leu Arg Lys Glu Phe
            35   40   45

Ser Pro Phe Gly Thr Ile Thr Ser Ala Lys Val Met Met Glu Gly Gly
        50   55   60

Arg Ser Lys Gly Phe Gly Phe Val Cys Phe Ser Ser Pro Glu Xaa Ala
65   70   75   80

Thr Lys Ala Val Thr Xaa Met Asn Gly Arg Ile Val Ala Thr Lys Pro
                85   90   95

Leu Tyr Val Ala Leu Ala Gln Arg Lys Glu Glu Arg Gln Ala His Leu
                100   105   110

Thr Asn Gln Tyr Met Gln Arg Met Ala Ser Val Arg Xaa Val Pro Asn
            115   120   125

Pro Val Ile Asn Pro Tyr Gln Pro Ala Pro Pro Ser Gly Tyr Phe Met
        130   135   140

Ala Ala Ile Pro Gln Thr Gln Asn Val Leu His Thr Ile Leu Leu Ala
145   150   155   160

Lys Leu Leu Asn

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<210> 1556
<211> 166
<212> PRT
<213> Homo sapiens

<220>
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<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (150)
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<400> 1556
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Xaa Xaa Leu Thr Leu Thr Xaa Gly Xaa Lys Xaa Xaa Xaa Xaa Thr Ala
 1               5                  10                  15

Val Ala Ala Ala Leu Ala Thr Ser Gly Ser Pro Gly Pro Val Arg Asn
             20              25              30

Ser Ala Arg Ala Gly Thr Ser Glu Phe Leu Asn Lys Val Thr Glu Ala
         35              40              45

Gln Glu Asp Gly Gln Ser Thr Ser Glu Leu Ile Gly Gln Phe Gly Val
     50              55              60

Gly Phe Tyr Ser Ala Phe Leu Val Ala Asp Lys Val Ile Val Thr Ser
 65              70              75              80

Lys His Asn Asn Asp Thr Gln His Ile Trp Glu Ser Asp Ser Asn Glu
             85              90              95

Phe Ser Val Ile Ala Asp Pro Arg Gly Asn Thr Leu Gly Arg Gly Thr
             100             105             110

Thr Ile Thr Leu Val Leu Lys Glu Glu Ala Ser Asp Tyr Leu Glu Leu
         115             120             125

Asp Thr Ile Lys Asn Leu Val Lys Lys Tyr Ser Gln Phe Ile Asn Phe
     130             135             140

Pro Ile Tyr Val Trp Xaa Ser Lys Thr Glu Thr Val Xaa Glu Pro Met
145             150             155             160

Glu Glu Glu Gly Ala Ala
                165
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<210> 1557
<211> 127
<212> PRT
<213> Homo sapiens

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<222> (1)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (120)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1557
Xaa Asn Val Val Glu Ala Gln Phe Asp Ser Arg Val Arg Ala Thr Gly
 1   5   10   15

His Ser Xaa Xaa Xaa Tyr Asn Lys Trp Glu Thr Ile Glu Ala Trp Thr
            20   25   30

Gln Gln Val Ala Thr Xaa Asn Pro Ala Leu Ile Ser Arg Ser Val Ile
        35   40   45

Gly Thr Thr Phe Glu Gly Arg Ala Ile Tyr Leu Leu Lys Val Gly Lys
    50   55   60

Ala Gly Gln Asn Lys Pro Ala Ile Phe Met Asp Cys Gly Phe Pro Met
65   70   75   80

Pro Xaa Xaa Trp Ile Ser Pro Cys Ile Xaa Pro Val Gly Phe Xaa Lys
            85   90   95

Xaa Ala Val Pro Phe Leu Xaa Thr Phe Xaa Xaa Xaa Leu Thr Asn Phe
            100   105   110

Xaa Asn Asn Leu Xaa Phe Tyr Xaa Pro Ala Leu Trp Pro Gln Tyr
        115   120   125

<210> 1558
<211> 109
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1558
Lys Ala Gly Ala Ala Ala Gly Gly Pro Gly Val Ser Gly Val Cys Val
  1   5   10   15

Cys Lys Ser Arg Tyr Pro Val Cys Gly Ser Asp Gly Thr Thr Tyr Pro
            20   25   30

Ser Gly Cys Gln Leu Arg Ala Ala Ser Gln Arg Ala Glu Ser Arg Gly
        35   40   45

Glu Lys Ala Ile Thr Gln Val Ser Lys Gly Thr Cys Glu Gln Gly Pro
    50   55   60

Ser Ile Val Thr Pro Pro Lys Asp Ile Trp Asn Val Thr Gly Ala Xaa
 65   70   75   80

Val Tyr Leu S r Cys Glu Val Ile Gly Ile Pro Thr Pro Val Leu Ile
                85   90   95

```
Trp Asn Lys Val Xaa Arg Gly His Tyr Gly Xaa Xaa Arg
            100                 105
```

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<210> 1559
<211> 102
<212> PRT
<213> Homo sapiens

<400> 1559
Gly Leu Arg Gly His Leu Arg Ser Ser Gly Ser Ser Ile Trp Asn Tyr
 1               5                  10                  15

Ile Lys Phe Arg Lys His Val Ser Arg Tyr Asp Ser Arg Thr Thr Ile
            20                  25                  30

Phe Ser Pro Glu Gly Arg Leu Tyr Gln Val Glu Tyr Ala Met Glu Ala
            35                  40                  45

Ile Gly His Ala Gly Thr Cys Leu Gly Ile Leu Ala Asn Asp Gly Val
        50                  55                  60

Leu Leu Ala Ala Glu Arg Arg Asn Ile His Lys Leu Leu Asp Glu Val
 65                  70                  75                  80

Phe Phe Ser Glu Lys Ile Tyr Lys Leu Asn Glu Asp Met Ala Cys Ser
                85                  90                  95

Val Ala Gly Ile Thr Phe
            100
```

```
<210> 1560
<211> 159
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (146)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1560
Ser Thr His Ala Ser Ala Ala His Pro Ser Thr Leu Thr His Pro Gln
 1               5                  10                  15

Arg Arg Ile Asp Thr Leu Asn Ser Asp Gly Tyr Thr Pro Glu Pro Asp
            20                  25                  30
```

```
Lys Pro Arg Pro Met Pro Met Asp Thr Ser Val Tyr Glu Ser Pro Tyr
        35              40                  45

Ser Asp Pro Glu Glu Leu Lys Asp Lys Lys Leu Phe Leu Lys Arg Asp
        50              55                  60

Asn Leu Leu Ile Ala Asp Ile Glu Leu Gly Cys Gly Asn Phe Gly Ser
65                      70              75                      80

Val Arg Gln Gly Val Tyr Arg Met Arg Lys Lys Gln Ile Asp Val Ala
                85              90                  95

Ile Lys Val Leu Lys Gln Gly Thr Glu Lys Ala Asp Thr Glu Glu Met
            100             105                 110

Met Arg Glu Ala Gln Ile Met His Gln Leu Asp Asn Pro Tyr Ile Val
        115             120                 125

Arg Leu Ile Gly Val Cys Gln Ala Glu Ala Leu Met Leu Val Met Glu
    130             135                 140

Met Xaa Gly Ala Gly Ala Ala Gln Val Pro Gly Arg Gln Glu Gly
145             150             155
```

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<210> 1561
<211> 155
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (139)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (140)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1561
Arg Ala His Glu Asn Glu Ile Thr Lys Val Arg Lys Val Thr Phe Asn
 1           5               10                  15

Gly Leu Asn Gln Met Ile Val Ile Glu Leu Gly Thr Asn Pro Leu Lys
            20              25                  30

Ser Ser Gly Ile Glu Asn Gly Ala Phe Gln Gly Met Lys Lys Leu Ser
        35              40                  45
```

```
Tyr Ile Arg Ile Ala Asp Thr Asn Ile Thr Ser Ile Pro Gln Gly Leu
    50              55              60

Pro Pro Ser Leu Thr Glu Leu His Leu Asp Gly Asn Lys Ile Ser Arg
65              70              75              80

Val Asp Ala Ala Ser Leu Lys Gly Leu Asn Asn Leu Ala Lys Leu Gly
            85              90              95

Leu Ser Phe Asn Ser Ile Ser Ala Val Asp Asn Gly Ser Leu Ala Asn
            100             105             110

Thr Pro His Leu Arg Glu Leu His Leu Asp Asn Asn Lys Leu Thr Arg
            115             120             125

Val Pro Gly Gly Leu Gln Ser Ile Lys Tyr Xaa Xaa Gly Gly Tyr Leu
    130             135             140

His Asn Asn His Ile Ser Val Val Gly Ser Lys
145             150             155
```

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<210> 1562
<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1562
Xaa Asn Gln Asn Ser Asn Gly Leu Val Phe Leu Leu Trp Gly Ser Tyr
1               5               10              15

Ala Gln Lys Lys Gly Ser Ala Ile Asp Arg Lys Arg His His Val Leu
            20              25              30

Gln Thr Ala His Pro Ser Pro Leu Ser Val Tyr Arg Gly Phe Phe Gly
            35              40              45

Cys Arg His Phe Ser Lys Thr Asn Glu Leu Leu Gln Lys Ser Gly Lys
    50              55              60

Lys Pro Ile Asp Trp Lys Glu Leu
65              70
```

```
<210> 1563
<211> 110
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1563
Arg Thr Arg Gly Arg Leu Leu Gly His Leu Lys Glu Thr Trp Gly His
 1               5                  10                  15

Pro Arg Arg Ala Ser Trp Val Val Arg Ser Arg Arg Cys Arg His Cys
            20                  25                  30

Leu Cys Phe Met Arg Lys Met Leu Ala Ala Val Ser Arg Val Leu Ser
            35                  40                  45

Gly Ala Ser Gln Lys Pro Ala Ser Arg Val Leu Val Ala Ser Arg Asn
        50                  55                  60

Phe Ala Asn Asp Ala Thr Phe Glu Ile Xaa Lys Cys Asp Leu His Arg
 65                  70                  75                  80

Leu Glu Glu Ala Leu Leu Ser Gln Gln Cys Ser Pro Arg Glu Asp Gly
                85                  90                  95

Leu Lys Tyr Tyr Arg Met Met Xaa Thr Val Pro Glu Trp Asn
            100                 105                 110


<210> 1564
<211> 95
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1564
Leu His Ser Xaa Cys Thr Arg Arg Gly Ser Gly Ser Leu Arg Leu Cys
 1               5                  10                  15

Ser Val Ala Arg Val Gly Gln Arg Arg Met Thr Ser Ala Ala Met Ser
            20                  25                  30

Lys Pro His Ser Glu Xaa Gly Thr Ala Phe Ile Gln Thr Gln Xaa Leu
        35                  40                  45

His Ala Xaa Met Ala Asp Thr Phe Leu Glu His Met Xaa Arg Leu Asp
    50                  55                  60
```

1634

```
Ile Asp Ser Pro Pro Xaa Thr Gly Arg Asn Thr Gly Ile Ile Cys Thr
65                  70              75                  80

Ile Gly Pro Ala Ser Arg Ser Xaa Gly Asp Gly Xaa Gly Xaa Asp
              85              90              95
```

<210> 1565
<211> 50
<212> PRT
<213> Homo sapiens

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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1565
```
Pro Thr Met Ala Ala Ile Arg Lys Lys Leu Val Ile Val Gly Asp Gly
  1               5               10                  15

Ala Cys Gly Lys Thr Cys Leu Leu Ile Val Phe Ser Xaa Asp Gln Phe
              20              25              30

Pro Glu Val Tyr Xaa Pro Thr Val Leu Xaa Glu Leu Tyr Cys Ala His
          35              40              45

Xaa Gly
    50
```

<210> 1566
<211> 161

<212> PRT
<213> Homo sapiens

<220>
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<222> (155)
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<400> 1566
Ala Ala Met Phe Asn Ile Arg Asn Ile Gly Lys Thr Leu Val Thr Arg
 1   5   10   15

Thr Gln Gly Thr Lys Ile Ala Ser Asp Gly Leu Lys Gly Arg Val Phe
            20   25   30

Glu Val Ser Leu Ala Asp Leu Gln Asn Asp Glu Val Ala Phe Arg Lys
            35   40   45

Phe Lys Leu Ile Thr Glu Asp Val Gln Gly Lys Asn Cys Leu Thr Asn
    50   55   60

Phe His Gly Met Asp Leu Thr Arg Asp Lys Met Cys Ser Met Val Lys
    65   70   75   80

Lys Trp Gln Thr Met Ile Glu Ala His Val Asp Val Lys Thr Thr Asp
                85   90   95

Gly Tyr Leu Leu Arg Leu Phe Cys Val Gly Phe Thr Lys Lys Arg Asn
            100   105   110

Asn Gln Ile Arg Lys Thr Ser Tyr Ala Gln His Gln Gln Val Arg Gln
        115   120   125

Ile Arg Lys Lys Met Met Glu Ile Met Thr Arg Glu Val Gln Thr Asn
        130   135   140

Asp Leu Lys Glu Val Val Asn Lys Leu Ile Xaa Asp Ala Leu Glu Lys
145   150   155   160

Thr

<210> 1567
<211> 113
<212> PRT
<213> Homo sapiens

<400> 1567
Pro Ser Leu Lys Gly Thr Lys Ala Gly Ala Pro Pro Arg Cys Gly Arg

```
      1                5                10               15

    Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Ser Pro
                 20               25               30

    Gly Pro Arg Gln Ser Pro Ala Arg Leu Val Ala Met Pro Arg Lys Ile
                 35               40               45

    Glu Glu Ile Lys Asp Phe Leu Leu Thr Ala Arg Arg Lys Asp Ala Lys
          50               55               60

    Ser Val Lys Ile Lys Lys Asn Lys Asp Asn Val Lys Phe Lys Val Arg
     65               70               75               80

    Cys Ser Arg Tyr Leu Tyr Thr Leu Val Ile Thr Asp Lys Glu Lys Ala
                 85               90               95

    Glu Lys Leu Lys Gln Ser Leu Pro Pro Gly Leu Ala Val Lys Glu Leu
                100              105              110

    Lys
```

```
<210> 1568
<211> 48
<212> PRT
<213> Homo sapiens

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1568
    Gly Cys Asn Tyr Gly Lys Pro Xaa His His Gly Val Asn Gln Leu Lys
     1                5                10               15

    Phe Ala Arg Ser Leu Gln Ser Xaa Ala Glu Glu Arg Ala Gly Arg His
                 20               25               30
```

1637

```
Xaa Gly Ala Leu Arg Val Leu Asn Ser Tyr Trp Val Gly Glu Asp Ser
        35                  40              45
```

<210> 1569
<211> 120
<212> PRT
<213> Homo sapiens

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<221> SITE
<222> (106)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1569
```
Gly Thr Ser Glu Arg Xaa Glu His Ala Met Lys Ala Ser Gly Thr Leu
 1               5               10              15

Arg Glu Tyr Lys Val Val Gly Arg Cys Leu Pro Thr Pro Lys Cys His
            20              25              30

Thr Pro Pro Leu Tyr Arg Met Arg Ile Phe Ala Pro Asn His Val Val
        35                  40              45

Ala Lys Ser Arg Phe Trp Tyr Phe Val Ser Gln Leu Lys Lys Met Lys
    50                  55              60

Lys Ser Ser Gly Glu Ile Val Tyr Cys Gly Gln Val Phe Glu Lys Ser
65              70              75              80

Pro Leu Arg Val Lys Asn Phe Gly Ile Trp Leu Arg Tyr Asp Ser Arg
                85              90              95

Ser Gly Thr His Asn Met Xaa Arg Glu Xaa Arg Asp Leu Thr Asn Ala
            100             105             110
```

```
Gly Ala Val Asn Gln Cys Asn Gly
        115                 120
```

<210> 1570
<211> 85
<212> PRT
<213> Homo sapiens

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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1570
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Cys Pro Pro Leu Trp Gln Glu Glu Val Trp Leu Asp Pro Asn Glu Thr
 1               5                  10                 15

Asn Glu Ile Ala Asn Ala Asn Ser Arg Gln Gln Ile Arg Lys Leu Ile
            20                  25                  30

Lys Asp Gly Leu Ile Ile Arg Lys Pro Val Thr Val His Ser Arg Ala
        35                  40                  45

Arg Cys Arg Lys Asn Thr Leu Ala Arg Arg Lys Gly Xaa His Met Gly
    50                  55                  60

Ile Val Ser Gly Lys Val Gln Pro Met Pro Glu Cys Gln Xaa Arg Ser
65                  70                  75                  80

His Gly Leu Arg Lys
                85
```

<210> 1571
<211> 135
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (134)
<223> Xaa equals any of the naturally occurring L-amino acids

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<400> 1571
Phe Ala Lys Met Thr Asn Thr Lys Gly Lys Arg Arg Gly Thr Arg Tyr
1               5               10              15

Met Phe Ser Arg Pro Phe Arg Lys His Gly Val Val Pro Leu Ala Thr
            20              25              30

Tyr Met Arg Ile Tyr Lys Lys Gly Asp Ile Val Asp Ile Lys Gly Met
        35              40              45

Gly Thr Val Gln Lys Gly Met Pro His Lys Cys Tyr His Gly Lys Thr
    50              55              60

Gly Arg Val Tyr Asn Val Thr Gln His Ala Val Gly Ile Val Val Asn
65              70              75              80

Lys Gln Val Lys Gly Lys Ile Leu Ala Lys Arg Ile Asn Val Arg Ile
            85              90              95

Glu His Ile Lys His Ser Lys Ser Arg Asp Ser Phe Leu Lys Arg Val
            100             105             110

Lys Glu Asn Asp Gln Lys Lys Lys Glu Ala Lys Glu Lys Gly Thr Trp
        115             120             125

Val Gln Leu Lys Arg Xaa Pro
    130             135


<210> 1572
<211> 71
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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1640

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<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1572
Thr Ala Thr Pro Ala Asn Xaa Xaa Leu Pro Trp Gly Xaa Lys Lys Xaa
 1                5                  10                  15

Ala Arg Arg Ser Lys Ile Xaa Ser Phe Val Xaa Val Cys Xaa Tyr Asn
            20                  25                  30
```

```
His Leu Met Pro Xaa Arg Tyr Ser Val Xaa Tyr Ser Pro Trp Gly Lys
         35              40              45


Ala Val Arg Ser Leu Gly Cys Leu Pro Xaa Phe Leu Ala Leu Lys Arg
     50              55              60


Xaa Ala Arg Arg Xaa Pro Arg
 65              70
```

<210> 1573
<211> 68
<212> PRT
<213> Homo sapiens

<220>
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<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1573
```
Ala Ala Ala Lys Gly Ala Ala Ala Met Ser Ala His Leu Gln Trp Met
 1               5               10              15


Val Val Arg Asn Cys Ser Ser Phe Leu Ile Lys Arg Asn Lys Gln Thr
             20              25              30


Tyr Ser Thr Glu Pro Asn Asn Leu Lys Ala Arg Asn Ser Phe Arg Tyr
         35              40              45


Asn Gly Leu Ile His Arg Lys Thr Val Gly Xaa Glu Pro Xaa Ala Asp
     50              55              60


Gly Lys Xaa Val
 65
```

<210> 1574
<211> 127

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<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1574
Gly Arg Met Xaa Pro Ala Lys Lys Gly Gly Glu Lys Lys Lys Gly Arg
 1               5               10              15

Ser Ala Ile Asn Glu Val Val Thr Arg Glu Tyr Thr Ile Asn Ile His
            20              25              30

Lys Arg Ile His Gly Val Gly Phe Lys Lys Arg Ala Pro Arg Ala Leu
        35              40              45

Lys Glu Ile Arg Lys Phe Ala Met Lys Glu Met Gly Thr Pro Asp Val
    50              55              60

Arg Ile Asp Thr Arg Leu Asn Lys Ala Val Trp Ala Lys Gly Ile Arg
65              70              75              80

Asn Val Pro Tyr Arg Ile Arg Val Arg Leu Ser Arg Lys Arg Asn Glu
            85              90              95

Asp Glu Asp Ser Pro Asn Lys Leu Tyr Thr Leu Val Thr Tyr Val Pro
            100             105             110

Val Thr Thr Phe Lys Asn Leu Gln Thr Val Asn Val Asp Glu Asn
        115             120             125
```

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<210> 1575
<211> 115
<212> PRT
<213> Homo sapiens

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1575
Trp Phe Pro Arg Ala Ala Gly Phe Arg His Xaa Xaa Val Gln Ile Arg
 1               5               10              15

Ala Xaa Glu Arg Lys Gly Thr Ser Ser Phe Gly Lys Xaa Arg Asn Lys
            20              25              30

Thr His Thr Leu Cys Arg Arg Xaa Gly Ser Lys Ala Tyr His Leu Gln
        35              40              45

Xaa Ser Thr Cys Gly Lys Phe Gly Tyr Pro Ala Lys Arg Lys Arg Lys
    50              55              60

Xaa Asn Trp Ser Ala Lys Ala Lys Arg Arg Asn Thr Thr Gly Thr Gly
65              70              75              80

Arg Xaa Arg His Leu Lys Phe Val Tyr Arg Arg Phe Arg His Gly Phe
```

1644

                    85   90   95

Xaa Glu Gly Thr Thr Pro Lys Pro Lys Arg Ala Ala Val Ala Ala Ser
            100   105   110

Ser Ser Ser
        115

<210> 1576
<211> 121
<212> PRT
<213> Homo sapiens

<220>
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<222> (108)
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<222> (114)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1576
Gly Arg Arg Ser Glu Met Thr Lys Gly Thr Ser Ser Phe Gly Lys Arg
  1   5   10   15

Arg Asn Lys Thr His Thr Leu Cys Arg Arg Cys Gly Ser Lys Ala Tyr
            20   25   30

His Leu Gln Lys Ser Thr Cys Gly Lys Cys Gly Tyr Pro Ala Lys Arg
        35   40   45

Lys Arg Lys Tyr Asn Trp Ser Ala Lys Ala Lys Arg Arg Asn Thr Thr
    50   55   60

Gly Thr Gly Arg Met Arg His Leu Lys Ile Val Tyr Arg Arg Phe Arg
65   70   75   80

His Gly Phe Arg Glu Gly Thr Thr Pro Lys Pro Lys Arg Ala Ala Val
            85   90   95

Ala Ala Phe Gln Phe Ile Phe Lys Asn Val Asn Xaa Phe Ser His Ala
            100   105   110

```
Ile Xaa Cys Xaa Gly Val Leu Lys Asn
        115                 120
```

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<210> 1577
<211> 61
<212> PRT
<213> Homo sapiens

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<221> SITE
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<220>
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<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1577
Gly Ile Val Gly Lys Tyr Gly Thr Arg Tyr Gly Ala Ser Leu Arg Lys
  1             5                 10                  15

Met Val Lys Lys Ile Glu Ile Ser Gln His Ala Lys Tyr Thr Cys Ser
            20                25                30

Phe Cys Gly Lys Thr Lys Met Lys Arg Arg Ala Val Gly Ile Trp His
        35                40                  45

Cys Gly Ser Cys Met Lys Thr Val Xaa Gly Xaa Ala Xaa
    50                55                60
```

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<210> 1578
<211> 74
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)
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<220>
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<220>
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<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1578
Glu Leu Gly Lys Gly Lys Met Glu Lys Pro Ser Pro Tyr Pro Ala Gln
 1               5                   10                  15

Gly Pro Cys Ile Ile Tyr Asn Glu Asp Asn Gly Ile Ile Lys Ala Phe
              20                  25                  30

Gln Lys His Pro Trp Asn Tyr Ser Ala Xaa Met Xaa Ser Lys Leu Lys
              35                  40                  45

His Phe Xaa Ser Leu Leu Pro Gly Gly Ala Cys Gly Asp Val Xaa Gly
     50                  55                  60

Ile Gly Xaa Glu Met Ala Phe Pro Gly Xaa
 65                  70


<210> 1579
<211> 98
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1579
Ser Xaa Met Ala Cys Ala Arg Pro Leu Ile Ser Val Tyr Ser Glu Lys
 1   5   10   15

Gly Glu Ser Ser Gly Lys Asn Val Thr Leu Pro Ala Val Phe Lys Ala
            20   25   30

Pro Ile Arg Pro Asp Ile Val Asn Phe Val His Thr Asn Leu Arg Lys
            35   40   45

Asn Asn Arg Gln Pro Tyr Ala Val Ser Glu Leu Ala Gly His Gln Thr
        50   55   60

Ser Ala Glu Ser Trp Gly Thr Gly Arg Ala Val Ala Arg Ile Pro Arg
 65   70   75   80

Xaa Arg Gly Gly Gly Thr Xaa Arg Ser Gly Xaa Gly Ala Phe Gly Asn
                85   90   95

Met Cys

<210> 1580
<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1580
Leu Ser Leu Xaa Gly Lys Lys Lys Lys Arg Leu Arg Val Asp Lys Trp
 1               5                  10                  15

Trp Gly Xaa Arg Lys Glu Leu Ala Thr Val Arg Thr Ile Cys Ser His
            20                  25                  30

Val Gln Asn Met Ile Lys Gly Val Thr Leu Gly Phe Arg Tyr Lys Met
        35                  40                  45

Arg Xaa Val Tyr Ala His Xaa Pro Ile Asn Val Val Ile Gln Glu Xaa
    50                  55                  60

Gly Ser Ile Val Glu Ile Xaa Xaa
65                  70


<210> 1581
<211> 153
<212> PRT
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<213> Homo sapiens

<400> 1581
Ala Ile Met Gly Arg Met His Ala Pro Gly Lys Gly Leu Ser Gln Ser
1   5   10   15

Ala Leu Pro Tyr Arg Arg Ser Val Pro Thr Trp Leu Lys Leu Thr Ser
            20   25   30

Asp Asp Val Lys Glu Gln Ile Tyr Lys Leu Ala Lys Lys Gly Leu Thr
            35   40   45

Pro Ser Gln Ile Gly Val Ile Leu Arg Asp Ser His Gly Val Ala Gln
        50   55   60

Val Arg Phe Val Thr Gly Asn Lys Ile Leu Arg Ile Leu Lys Ser Lys
65   70   75   80

Gly Leu Ala Pro Asp Leu Pro Glu Asp Leu Tyr His Leu Ile Lys Lys
                85   90   95

Ala Val Ala Val Arg Lys His Leu Glu Arg Asn Arg Lys Asp Lys Asp
            100   105   110

Ala Lys Phe Arg Leu Ile Leu Ile Glu Ser Arg Ile His Arg Leu Ala
        115   120   125

Arg Tyr Tyr Lys Thr Lys Arg Val Leu Pro Pro Asn Trp Lys Tyr Glu
    130   135   140

Ser Ser Thr Ala Ser Ala Leu Val Ala
145   150

<210> 1582
<211> 129
<212> PRT
<213> Homo sapiens

<400> 1582
Gly Pro Ala Asn Met Gly Arg Val Arg Thr Lys Thr Val Lys Lys Ala
1   5   10   15

Ala Arg Val Ile Ile Glu Lys Tyr Tyr Thr Arg Leu Gly Asn Asp Phe
            20   25   30

His Thr Asn Lys Arg Val Cys Glu Glu Ile Ala Ile Ile Pro Ser Lys
        35   40   45

Lys Leu Arg Asn Lys Ile Ala Gly Tyr Val Thr His Leu Met Lys Arg

1650

```
                50                      55                      60

Ile Gln Arg Gly Pro Val Arg Gly Ile Ser Ile Lys Leu Gln Glu Glu
 65              70              75              80

Glu Arg Glu Arg Arg Asp Asn Tyr Val Pro Glu Val Ser Ala Leu Asp
                85              90                      95

Gln Glu Ile Ile Glu Val Asp Pro Asp Thr Lys Glu Met Leu Lys Leu
            100             105             110

Leu Asp Phe Gly Ser Leu Ser Asn Leu Gln Ser Leu Ser Leu Gln Leu
            115             120             125

Gly
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<210> 1583
<211> 109
<212> PRT
<213> Homo sapiens

<400> 1583
```
Asn Asn Gly Arg Ala Lys Lys Gly Arg Gly His Val Gln Pro Ile Arg
 1               5               10              15

Cys Thr Asn Cys Ala Arg Cys Val Pro Lys Asp Lys Ala Ile Lys Lys
            20              25              30

Phe Val Ile Arg Asn Ile Val Glu Ala Ala Ala Val Arg Asp Ile Ser
            35              40              45

Glu Ala Ser Val Phe Asp Ala Tyr Val Leu Pro Lys Leu Tyr Val Lys
     50              55              60

Leu His Tyr Cys Val Thr Val Pro Ser Ile Ala Arg Leu Leu Gly Ile
 65              70              75              80

Asp Pro Ala Lys Pro Gly Arg Thr Glu His Pro His His Asp Ser Asp
                85              90                      95

Leu Leu Ala Leu His Leu Arg Pro Pro Pro Lys Pro Met
            100             105
```

<210> 1584
<211> 119
<212> PRT

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<213> Homo sapiens

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (118)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1584
Val Gln Arg Phe Ile Lys Ile Asp Gly Lys Val Arg Thr Asp Ile Thr
 1               5                  10                  15

Tyr Pro Ala Gly Phe Met Asp Val Ile Ser Ile Asp Lys Thr Gly Glu
                20                  25                  30

Asn Phe Arg Leu Ile Tyr Asp Thr Lys Gly Arg Phe Ala Val His Arg
            35                  40                  45

Ile Thr Pro Glu Glu Ala Lys Tyr Lys Leu Cys Xaa Val Arg Lys Ile
        50                  55                  60

Phe Val Gly Thr Lys Gly Ile Pro His Leu Val Thr His Asp Ala Arg
 65                  70                  75                  80

Thr Ile Arg Tyr Pro Asp Pro Leu Ile Lys Val Asn Asp Pro Phe Ile
                85                  90                  95

Leu Ile Xaa Arg Leu Ala Arg Leu Leu Ile Ser Ser Ile Ser Thr Leu
            100                 105                 110

Val Thr Cys Val Trp Xaa Leu
        115
```

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<210> 1585
<211> 81
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
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<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1585
Gly Arg Tyr Ala Ala Lys Arg Phe Arg Lys Ala Gln Cys Xaa Ile Val
 1               5               10                  15


Glu Arg Leu Thr Asn Ser Met Met Met Xaa Gly Arg Asn Asn Gly Lys
            20              25              30


Lys Leu Met Thr Val Arg Ile Val Xaa His Ala Phe Glu Ile Ile Arg
            35              40              45


Leu Leu Thr Gly Xaa Glu Pro Ser Ala Gly Pro Gly Glu Arg His His
        50              55              60


Gln His Xaa Ser Pro Gly Arg Xaa His Xaa His Trp Ala Arg Arg Asp
 65              70              75                  80


Cys
```

<210> 1586
<211> 111
<212> PRT
<213> Homo sapiens

<400> 1586
Lys Asn Cys Ile Val Leu Ile Asp Ser Thr Pro Tyr Arg Gln Trp Tyr
 1   5   10   15

Glu Ser His Tyr Ala Leu Pro Leu Gly Arg Lys Lys Gly Ala Lys Leu
                20   25   30

Thr Pro Glu Glu Glu Glu Ile Leu Asn Lys Lys Arg Ser Lys Lys Ile
            35   40   45

Gln Lys Lys Tyr Asp Glu Arg Lys Lys Asn Ala Lys Ile Ser Ser Leu
     50   55   60

Leu Glu Glu Gln Phe Gln Gln Gly Lys Leu Leu Ala Cys Ile Ala Ser
 65   70   75   80

Arg Pro Gly Gln Cys Gly Arg Ala Asp Gly Tyr Val Leu Glu Gly Lys
                85   90   95

Glu Leu Glu Phe Tyr Leu Arg Lys Ile Lys Ala Arg Lys Gly Lys
                100   105   110

<210> 1587
<211> 125
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1587
Arg Thr Met Pro Gly Val Thr Val Lys Asp Val Asn Gln Gln Glu Phe
 1   5   10   15

1654

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Val Arg Ala Leu Ala Ala Phe Leu Lys Lys Ser Gly Lys Leu Lys Val
             20                  25                  30

Pro Glu Trp Val Asp Thr Val Lys Leu Ala Lys His Lys Glu Leu Ala
             35                  40                  45

Pro Tyr Asp Glu Asn Trp Phe Tyr Thr Arg Ala Ala Ser Thr Ala Arg
     50                  55                  60

His Leu Tyr Leu Arg Gly Gly Ala Gly Val Gly Ser Met Thr Lys Ile
 65                  70                  75                  80

Tyr Gly Gly Arg Gln Arg Asn Gly Val Met Pro Ser His Phe Ser Arg
                 85                  90                  95

Gly Ser Lys Ser Val Ala Arg Arg Xaa Leu Gln Ala Leu Gly Gly Ala
                100                 105                 110

Glu Asn Gly Gly Xaa Gly Pro Arg Trp Arg Pro Ala Asn
             115                 120                 125
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<210> 1588
<211> 38
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1588
Cys Met Leu Xaa Leu Val Leu Xaa Leu Leu Ser Ser Ser Ser Ala Glu
 1   5   10   15

Glu Tyr Xaa Gly Leu Ser Ala Asn Gln Cys Ala Val Xaa Ala Lys Asp
            20   25   30

Xaa Val Xaa Cys Gly Tyr
        35

<210> 1589
<211> 55
<212> PRT
<213> Homo sapiens

<400> 1589
Gly Thr Ala Thr Gln Gly Leu Ser Pro Val His Thr Pro Gly Asp Gly
 1   5   10   15

Arg Leu His Lys Ala Val Ser Val Gly Pro Arg Val His Ile Ile Glu
            20   25   30

Glu Leu Gln Ile Phe Ser Ser Gly Gln Pro Val Ala Glu Ser Ala Pro
        35   40   45

Gly Thr Pro Thr Gly Gly Leu
    50   55

<210> 1590
<211> 92
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1590
Leu Glu Asp Gly Phe Gly Glu His Pro Phe Tyr His Cys Leu Xaa Ala

```
      1                   5                  10                 15

Glu Val Pro Lys Glu His Trp Thr Pro Glu Gly His Ser Ile Val Gly
            20                  25                  30

Phe Ala Met Tyr Tyr Phe Thr Tyr Asp Pro Trp Ile Gly Lys Leu Leu
            35                  40                  45

Tyr Leu Glu Asp Phe Phe Val Met Ser Asp Tyr Arg Gly Phe Gly Ile
      50                  55                  60

Gly Ser Glu Ile Leu Lys Asn Leu Ser Gln Val Ala Met Arg Cys Arg
 65                  70                  75                  80

Cys Ser Ser Met His Phe Phe Gly Ser Arg Met Glu
                85                  90
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<210> 1591
<211> 139
<212> PRT
<213> Homo sapiens

<220>
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1657

<222> (114)
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<400> 1591
Xaa Gly Gly Phe Xaa Ile Thr Xaa Gly Xaa Asp Glu Gly Lys Leu Val
 1   5   10   15

Thr Pro Ala Gly Asp Arg Ser Gly Ile Pro Gly Ser Thr His Ala Ser
            20   25   30

Gly Arg Asp Val Ser Gln Lys Val Leu Arg Ser Gln Thr Trp Val Pro
            35   40   45

Arg Leu Pro Ala Ser Glu Ala Xaa Ser Arg His Arg Gly Lys Val Lys
    50   55   60

Ser Phe Pro Lys Asp Asp Pro Ser Lys Pro Val His Leu Thr Ala Phe
65   70   75   80

Leu Gly Tyr Lys Ala Gly Met Thr His Ile Val Arg Glu Val Asp Arg
            85   90   95

Pro Gly Ser Lys Val Asn Lys Lys Glu Gly Gly Gly Gly Cys Asp His
            100   105   110

Cys Xaa Asp Thr Xaa His Gly Gly Leu Trp Ala Leu Xaa Ala Thr Leu
        115   120   125

Glu Asn Pro Arg Xaa Leu Arg Asn Phe Lys Asn
    130   135

<210> 1592
<211> 42
<212> PRT

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<213> Homo sapiens

<400> 1592
Ala Glu His Gly Asp Gln Asp Tyr Ile Trp His Cys Ile Asp Leu Phe
 1               5                  10                  15

Leu Asp Phe Ile Thr Val Phe Arg Lys Leu Met Met Ile Leu Ala Met
            20                  25                  30

Asn Glu Lys Asp Lys Lys Lys Glu Lys Lys
            35                  40
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<210> 1593
<211> 85
<212> PRT
<213> Homo sapiens

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<222> (60)
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<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1593
Trp Ile Pro Arg Ala Ala Gly Ser Leu Ser Leu Ala Gln Arg Arg Gly
 1   5   10   15

Xaa Thr Lys Thr Tyr Thr Val Gly Xaa Glu Glu Cys Thr Val Xaa Pro
            20   25   30

Xaa Leu Ser Ile Pro Cys Lys Leu Gln Ser Gly Thr His Cys Xaa Trp
        35   40   45

Thr Asp Gln Leu Leu Gln Gly Xaa Glu Lys Gly Xaa Gln Xaa Arg His
    50   55   60

Leu Ala Cys Leu Pro Arg Glu Pro Gly Leu Gly Thr Trp Gln Xaa Leu
65   70   75   80

Arg Ser Gln Ile Ala
                85

<210> 1594
<211> 183
<212> PRT
<213> Homo sapiens

<220>
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<222> (80)
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<220>
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<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (122)
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (151)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (152)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1594

```
Ala Ala Arg Gly Ala Gln Arg Asp Thr Arg Glu Pro Thr Met Ala Pro
 1               5                10                15

Phe Glu Pro Leu Ala Ser Gly Ile Leu Leu Leu Leu Trp Leu Ile Ala
            20              25              30

Pro Ser Arg Ala Cys Thr Cys Val Pro Pro His Pro Gln Thr Ala Phe
        35              40              45

Cys Asn Ser Asp Leu Val Ile Arg Ala Lys Phe Val Gly Thr Pro Glu
    50              55              60

Val Asn Gln Thr Thr Leu Tyr Gln Arg Tyr Glu Ile Lys Met Thr Xaa
65              70              75              80

Met Tyr Lys Gly Phe Gln Ala Leu Gly Asp Ala Ala Asp Ile Arg Phe
            85              90              95

Val Tyr Thr Pro Ala Met Glu Ser Val Cys Xaa Tyr Phe His Arg Ser
            100             105             110

His Asn Arg Ser Glu Glu Phe Leu Ile Xaa Gly Lys Leu Gln Asp Gly
        115             120             125

Leu Leu His Ile Thr Thr Cys Xaa Phe Val Ala Pro Trp Asn Ser Leu
        130             135             140
```

```
Ser Leu Ala Gln Arg Arg Xaa Xaa Thr Lys Thr Tyr Thr Val Gly Xaa
145                 150             155             160

Glu Glu Met His Lys Cys Phe Pro Val Tyr Pro Ser Pro Ala Asn Cys
                165             170             175

Arg Val Gly Thr His Cys Leu
            180
```

<210> 1595
<211> 153
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (143)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (151)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1595
```
Ser Thr Cys Pro Asp Glu Gln Cys Val Asn Ser Pro Gly Ser Tyr Gln
  1           5               10              15

Cys Val Pro Cys Thr Glu Gly Phe Arg Gly Trp Asn Gly Gln Cys Leu
            20              25              30

Asp Val Asp Glu Cys Leu Glu Pro Asn Val Cys Ala Asn Gly Asp Cys
          35              40              45

Ser Asn Leu Glu Gly Ser Tyr Met Cys Ser Cys His Lys Gly Tyr Thr
        50              55              60

Arg Thr Pro Asp His Lys His Cys Arg Asp Ile Asp Glu Cys Gln Gln
65              70              75              80

Gly Asn Leu Cys Val Asn Gly Gln Cys Lys Asn Thr Glu Gly Ser Phe
              85              90              95

Arg Cys Thr Val Asp Arg Gly Tyr Gln Leu Ser Ala Ala Lys Asp Gln
            100             105             110

Phe Glu Asp Ile Asp Glu Cys His Thr Val Ile Ser Val Ala His Gly
            115             120             125
```

```
His Ala Arg Thr Leu Lys Leu Phe Ser Met Cys Phe Leu Thr Xaa Val
    130             135             140

Thr Glu His Leu Gly Leu Xaa Thr Leu
145             150
```

<210> 1596
<211> 111
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1596
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Leu Gly Ser Ser Ala Met Ala Pro Ser Arg Lys Phe Phe Val Gly Gly
  1             5               10              15

Asn Trp Lys Met Asn Gly Arg Lys Gln Ser Leu Gly Glu Leu Ile Gly
            20              25              30

Thr Leu Asn Ala Ala Lys Val Pro Ala Asp Thr Glu Val Val Cys Ala
        35              40              45

Pro Pro Thr Ala Tyr Ile Asp Phe Ala Arg Gln Lys Leu Asp Pro Lys
    50              55              60

Ile Ala Val Ala Ala Gln Asn Cys Tyr Lys Val Thr Asn Gly Ala Phe
 65              70              75              80

Thr Gly Glu Ile Ser Pro Gly Met Ile Lys Asp Cys Gly Pro Arg Gly
            85              90              95

Trp Ser Trp Gly Thr Xaa Arg Glu Ala Cys Leu Trp Gly Ile Arg
            100             105             110
```

<210> 1597
<211> 82
<212> PRT
<213> Homo sapiens

<220>
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<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1597
Ile Phe Glu Asp Ser Asp Ser Leu Arg Leu Arg Arg Asp Val Leu Pro
 1   5   10   15

Ala Ala Xaa Val Gln Ala Ala Leu Pro Ala Thr Ser Cys Val Pro His
            20   25   30

Ala Lys Val Pro Lys Ser His Val His Pro Arg Ser Ala Leu Ser Leu
        35   40   45

Thr Cys Leu Leu Leu Val His Leu Ser Ile Ala His Leu His Leu Ala
    50   55   60

Ser Ile Asn Ala Leu Leu Xaa Gln Pro Tyr His Pro Gly Ser Xaa Xaa
 65   70   75   80

Ser Pro

<210> 1598
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids


<220>
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<220>
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<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids


<220>
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<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids


<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1598
Xaa Lys Xaa Gly Arg Asn Lys Ala Arg Pro Leu Thr Ser Leu Arg Xaa
  1               5                  10                  15


Thr Phe Xaa Ala Thr Phe Cys Pro Val Xaa Gly Thr Tyr Ile Leu Asn
              20                  25                  30


Asp Cys Pro Xaa Thr His Ser Gly Ile Phe Phe Phe Leu Lys Xaa Xaa
          35                  40                  45


Xaa Lys Ala Phe
      50
```

<210> 1599
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1599
Ala Phe Asn Xaa Ser Tyr Arg Lys Xaa Val Xaa Ala Val Arg Xaa Glu
 1   5   10   15

Phe Arg Val Thr Gln Arg Pro Gly Leu Xaa Xaa Leu Gly Leu Glu Phe
            20   25   30

<210> 1600
<211> 19
<212> PRT
<213> Homo sapiens

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<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1600
Ala Arg Gly Phe Phe Phe Phe Phe Phe Phe Phe Xaa Xaa Phe Xaa Phe
 1               5                   10                  15

Phe Lys Lys
```

```
<210> 1601
<211> 22
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1601
Arg Xaa Asn Arg Val Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe Phe
 1               5                   10                  15

Phe Ph  Phe Xaa Pro Xaa
            20
```

```
<210> 1602
<211> 104
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1602
Asp Phe Gly Arg Ser Phe Leu Leu Trp Phe Ser Leu Phe Phe Leu Pro
 1               5                  10                  15

Phe Tyr Ser Ala Arg Ile Ser Gly Gly Leu Met Val Gly Tyr Asn Val
            20                  25                  30

Ser Val Leu Leu Gln Ile Gly Leu Lys Gly Tyr Pro Ala Glu Ser Pro
        35                  40                  45

Ala Phe Leu Ser Ser Ile Tyr Phe Ser Gly Lys Leu Phe Phe Leu Phe
    50                  55                  60

Phe Phe Lys Val Asn Leu Cys Ile Glu Leu Asn Cys Ile Ser Val Phe
65                  70                  75                  80

Pro Ala Tyr Val Tyr Ile Ile Pro Met Ile Pro Asn Ser Tyr Leu Tyr
                85                  90                  95

Phe Xaa Thr Asn Ser Gln Ser Glu
            100
```

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<210> 1603
<211> 86
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
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<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1603
Phe Leu Met Leu Ser Phe Met Gly Ile Val Thr Phe Leu Phe Ser Lys
  1               5                   10                  15

Ser His Cys Trp Asn His Gln Gly Cys Gly Met Ser Leu Xaa Val Leu
                20                  25                  30

Phe Met Gln Val Thr Val Thr Phe Ala Ile Met Ala Xaa Phe Glu Thr
            35                  40                  45

Leu Ile Met Cys Phe Tyr Phe Phe Ile Pro Val Lys Met Xaa Xaa Lys
        50                  55                  60

Arg Lys Lys Val Val Ile Ala Pro Xaa Ile Ser Gly Ser Lys Leu Xaa
65                  70                  75                  80

Xaa Lys Phe Pro Lys Lys
                85


<210> 1604
<211> 34
<212> PRT
<213> Homo sapiens
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<400> 1604
Ser Asp Glu Ile Ile Tyr Asn Phe Ile Val Thr Ser Ser Val Phe Pro
 1   5   10   15

Phe Glu Arg Cys Met Asn Ser Leu His Phe Tyr Ser Asn Val Leu Ser
             20   25   30

Val Asp

<210> 1605
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
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<220>
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<220>
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<222> (37)
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<220>
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<220>
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<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1605
Leu Leu Val Trp Ser Glu Tyr Asn Thr Ser Ile Ile Thr Tyr Asn Ser
 1   5   10   15

```
Xaa Pro Gly Thr Gly Gly Tyr Lys Tyr Asn Phe Phe Lys Xaa Asn Ser
            20                      25                  30

Trp Leu Ser Thr Xaa Leu Gln Val Pro Leu Xaa Gly Xaa Leu Trp Xaa
            35                  40                  45

Ile Thr Leu Gly Lys
        50
```

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<210> 1606
<211> 32
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 1606
Asp Ala Trp Ala Asp Ala Trp Gly Lys Val Ser Ser Ser Leu Xaa Ser
 1   5   10   15

Xaa Ile Cys Xaa Leu Xaa Xaa Arg Lys Val Arg Xaa Gly Gln Xaa Met
         20   25   30

<210> 1607
<211> 31
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1607
Leu Ile Met Asp Thr Ile Leu Asn Lys Xaa Ile Gln Val Lys Pro Val
 1   5   10   15

Lys Glu Lys Glu Ile Lys Val Ser Gly Ser Cys Xaa Ser Xaa Val
             20   25   30

<210> 1608
<211> 107
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (38)
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<220>
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<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (76)
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<220>
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<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<220>
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<400> 1608
Asp Pro Gln Gly Ile Arg His Pro His Ile Val Gln Leu Lys Asp Phe
 1               5                  10                  15

Gln Cys Glu Leu Gly Ala Gly Xaa Leu Pro Lys Gly Val Glu Lys Asp
            20                  25                  30

Ile Xaa Phe Arg Pro Xaa Leu Cys Leu Leu Lys Gln Gln Leu Gly Thr
        35                  40                  45

Val Glu Pro Ile Asn Leu Xaa Phe Asn Pro Leu Gly Ser Phe Phe Ala
        50                  55                  60

Gly Gln Gly Gly Gly Arg Lys Pro Trp Xaa Phe Xaa Xaa Phe Xaa Ser
65                  70                  75                  80

Gln Leu Asn Pro Gly Gln Xaa Asn Phe Leu Gly Pro Leu Lys Glu Lys
            85                  90                  95

Xaa Phe Gly Pro Xaa Xaa Xaa Xaa Leu Ser Xaa
            100                 105


<210> 1609
<211> 72
<212> PRT
<213> Homo sapiens

<220>
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<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1609
Arg Gln Thr Ser Thr Ala Lys Leu Gln Lys Gly Gly Phe Cys Ser Arg
 1   5   10   15

Arg Lys Glu Asp Val Tyr Leu Gln Gly Ala Lys Gln Gly Glu Leu Gly
                20   25   30

Ser Ser Cys Leu Arg Pro Asn Leu His Asp Asp Leu Gln Ala Arg Val
            35   40   45

Phe Lys Xaa Ser Gly Lys Phe Pro Gly Lys Pro Glu Val Lys Gly Gln
        50   55   60

Asn Cys Lys Ser Val Glu Ile Gly
 65   70

<210> 1610
<211> 77
<212> PRT
<213> Homo sapiens

<400> 1610
Leu Tyr Arg Gly Ser Val Gln Gly Arg Val Glu Leu Leu Ser Glu Gly
 1   5   10   15

Ser Leu Gly Gly Pro Leu Arg Pro Gly Pro Asp Pro Val Leu Gln Gly
                20   25   30

Leu Ser Gln Gly Gln Val His Gly Glu Thr Met Gly Cys Leu Ser Asp
            35   40   45

Thr Asp Leu Ala Leu Leu Ser Pro Pro Ile Arg Leu Ser Phe Leu Cys
        50   55   60

Ser Glu Cys Leu Gln Gly Leu Asp Pro Gly Lys Glu Phe
 65   70   75

<210> 1611
<211> 72
<212> PRT
<213> Homo sapiens

<220>
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<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals. any of the naturally occurring L-amino acids

<400> 1611
Glu Asn Leu Pro Ser Gln Xaa Ala Pro Ala Gly Leu Pro Lys Xaa Xaa
 1               5                   10                  15
```

Gln Pro Cys Leu Tyr Phe Tyr Gly Xaa Asn Gly His Lys Ile Ile Ile
              20   25   30

Asn Leu Thr Lys Thr Xaa Leu Phe Ser Xaa Phe Leu Glu Leu Ser Trp
          35   40   45

Ser Phe Leu Ile Leu Xaa Phe Gly Asn Xaa Arg Leu Phe Leu Lys Cys
      50   55   60

Phe Xaa Asp Val Lys Ile Xaa Tyr
65   70

<210> 1612
<211> 63
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1612

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Arg Glu Ser Glu Met Leu Cys Asn Leu Leu Xaa Gln Leu Lys His Xaa
 1               5                  10                  15

Met Leu Arg Gly Arg Asn Tyr Lys Xaa Cys Ser Asn Leu Phe Trp Val
            20                  25                  30

Ile Xaa Met Tyr Leu Trp Val Gln Ala Leu Phe Gly Gly Phe Xaa Phe
         35                  40                  45

Gln Arg Asn Xaa Xaa Lys Val Xaa Leu Leu Ile Lys Lys Arg Lys
    50                  55                  60
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<210> 1613
<211> 22
<212> PRT
<213> Homo sapiens

<220>
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<220>
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<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1613
Lys Ser Xaa Ser Xaa Thr Ala Gly Asp Arg Xaa Xaa Thr Ser Gly Ser

1678

```
1               5               10              15

Pro Gly Leu Gln Glu Phe
              20
```

<210> 1614
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<220>
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<222> (85)
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<400> 1614
Asp Gly Gly Phe Xaa Xaa Phe Phe Phe Phe Phe Phe Phe Xaa Xaa Phe
 1               5                  10                  15

Phe Phe Tyr Xaa Trp Val Ile Ser Thr Cys Phe Ile Pro Ala Ile Lys
            20                  25                  30

Ile Ile Lys Asn Ile Ser Asn Tyr Tyr Thr His Thr Lys Xaa Val Gln
            35                  40                  45

Ser Leu Xaa Leu Pro Pro Thr Pro Arg Gly Lys Asn Cys Phe Xaa Leu
    50                  55                  60

Trp Glu Val Val Ser Glu Thr Arg Gly Gln Xaa Thr Gln Xaa Arg Leu
65                  70                  75                  80

Gly Gly Xaa Arg Xaa
                85


<210> 1615
<211> 85
<212> PRT
<213> Homo sapiens

<400> 1615
Tyr Ala Val Pro Cys Ser Gly Ile Gln Gly Arg Phe Ser Pro Leu Ser
 1               5                  10                  15
```

```
Phe Leu Leu Ala Gly Asp Ser Cys Thr Cys Ala Gly Ser Cys Lys Cys
            20              25              30

Lys Glu Cys Lys Cys Thr Ser Cys Lys Lys Ser Lys Trp Asp Pro Leu
            35              40              45

Phe Pro Leu Pro Leu Pro Val Leu Gln Pro Val Pro Ser Ser Pro Ser
    50              55              60

Ser Gly Glu Leu Lys Gln Val Trp Gly Cys Pro Ile Ala Pro Gly Asn
65              70              75              80

Trp Trp Pro Pro Gln
                85
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<210> 1616
<211> 29
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1616
Ala Glu Gly Asn Ile Arg Xaa Ala Lys Lys Lys Lys Lys Lys Lys Lys
 1               5               10              15
```

```
Lys Lys Lys Lys Lys Lys Lys Lys Xaa Xaa Lys Xaa Xaa
            20                  25
```

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<210> 1617
<211> 37
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
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```
<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids
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```
<400> 1617
Gly Pro Ala Xaa Trp Arg Glu Thr Pro Pro Xaa Leu Tyr Lys Glu Phe
  1               5                  10                  15

Pro Gly Val Xaa Gly Ser Phe Ser Leu Xaa Ser Glu Trp Gly Ala Gln
            20                  25                  30

Ile Trp Ala Xaa Cys
          35
```

```
<210> 1618
<211> 22
<212> PRT
<213> Homo sapiens
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1618
Gly Xaa Gly Phe Xaa Pro Ser Pro Ser Cys Phe Pro Gln Cys Leu Lys
 1               5                  10                  15

Xaa Leu Asp Gly Leu Xaa
             20



<210> 1619
<211> 52
<212> PRT
<213> Homo sapiens

<400> 1619
Gln Ser Ile Ser Leu Asn Arg Asp Gly Val Glu Glu Leu Lys Val Gly
 1               5                  10                  15

Ile Cys Ser Leu Met Thr Thr Met Phe Thr Ile Cys Cys Gly Leu Val
                 20                  25                  30

Gly Ala Leu Arg Gln Glu Asn His Val Glu Pro Thr Gly Ser Arg Pro
             35                  40                  45

Ala Trp Glu Thr
     50



<210> 1620
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<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1620
Pro Thr Glu Gln Val Thr Leu Gly Ile Thr Ala Gln Ser Tyr Ser Arg
 1               5                  10                  15

Val His Ile Asn Asn Arg Val Tyr Asp Leu Asp Xaa Gly Ser Gly His
            20                  25                  30

Pro Asp Xaa Ala Ala Ala Ile Lys Gly Ser Phe Val Gln Arg Leu Lys
        35                  40                  45

Ser Tyr Val Ile
    50


<210> 1621
<211> 113
<212> PRT
<213> Homo sapiens

<220>
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<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of th  naturally occurring L-amino acids

<400> 1621
Leu Ph  Pro Ala Pro Ala Pro Pro Pro Ala Pro Ala Phe Ala Pro Pro
```

```
  1               5                   10                  15

Pro Lys Val Pro Ser Pro Glu Arg Ser Ala Pro Arg Val Pro Leu Pro
            20                  25                  30

Ser Pro Gln Pro Ser Tyr Pro Phe Arg Pro Ala Ala Ser Gly Gly Thr
            35                  40                  45

Pro Pro Pro Ala Cys Leu Pro Pro Ala Gln Pro Cys Gln Val Pro Pro
        50                  55                  60

Ala Met Asn Leu Phe Arg Phe Leu Gly Lys Leu Ser Gln Leu Leu Ala
65                  70                  75                  80

Ile Ile Leu Leu Leu Leu Xaa Ile Trp Asn Ser Arg Ser Cys Ala Glu
                85                  90                  95

Ile Gln Glu Lys Asn Ser Pro Val Trp Cys Gly Xaa Phe Asn Gly Xaa
            100                 105                 110

Ile
```

<210> 1622
<211> 21
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1622
```
Val Phe Lys Thr Met Xaa Gln Val Ser Asn Asp Glu Ile Lys His Leu
  1               5                   10                  15

Phe Val Leu Tyr Gln
            20
```

<210> 1623
<211> 40
<212> PRT
<213> Homo sapiens

<220>
<221> SITE

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<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1623
Leu Arg Thr Ser Cys Phe Xaa Leu Asn Xaa Met Ile His Phe Ile Lys
 1               5                   10                  15

Val Pro Val Ile Lys Tyr Xaa Val Lys Tyr Leu Leu Xaa Trp Thr Ile
            20                  25                  30

Xaa Cys Lys Leu Pro Phe Xaa Xaa
         35                  40




<210> 1624
<211> 95
<212> PRT
<213> Homo sapiens

<220>
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<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1624
Ile His Pro Xaa Leu Ala Ser Gln Val Ala Gly His Tyr Arg Arg Glu
 1               5                   10                  15


His Ser Arg Pro Arg Leu Lys Xaa Ala Tyr Ser Lys Lys Gln Phe Gln
              20                  25                  30
```

```
Phe Leu Ser Lys Leu Cys Xaa Xaa Arg Gly Ser Thr Asp Phe Leu Gly
        35              40              45

Pro Val Asn Leu Asn Gln Ser Leu Arg Phe Cys Gln Glu Ser Ser Leu
    50              55              60

Leu Ser Lys Trp Val Phe Pro Asn Gly His Asn Gly Lys Xaa Xaa Arg
65              70              75              80

Gly Xaa Asn Ile Lys Lys Xaa Lys Lys Asn Leu Gly Gly Gly Xaa
                85              90              95
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<210> 1625
<211> 40
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
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<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1625
```
Ala Arg Ala Thr Met Ala Leu Trp Thr Xaa Val Ser Phe Ala Glu Xaa
1               5               10              15

Leu Glu Arg Gly Ser Asp Glu Lys Val Xaa Leu Lys Arg Leu Ala Arg
            20              25              30

Leu Leu Gly Leu Ile Thr Ala Pro
        35              40
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<210> 1626
<211> 26
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1626
Ala Arg Ala Gly Ile Val Pro Xaa His Ser Ser Leu Gly Asp Arg Ala
 1   5   10   15

Arg Leu His Leu Lys Lys Lys Lys Lys Xaa
             20   25

<210> 1627
<211> 171
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (121)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

1689

<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (155)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1627
Glu Leu Gln Ala Ser Glu Asn Gln Pro Cys Ser Arg His Ala Arg Pro
 1   5   10   15

Arg Leu Pro Ser Ser Leu Phe Pro Leu Pro Ala Gln Pro Ser Leu Pro
             20   25   30

Ser Ser Ala Gly Lys Ala Gly Thr His Ser Gly Cys Leu Pro Pro Gly
         35   40   45

Gly Lys Glu Arg Glu Gly Gly Trp Val Gly Xaa Gly Leu Pro Pro Gly
     50   55   60

Asn Val Thr Leu Pro Gly Pro Arg Ile Ala Pro Gly Pro Lys Pro Lys
 65   70   75   80

Ala Gln Pro Gly Thr Lys Leu Arg Xaa Ser Ala Gly Arg Ser Tyr Phe
                 85   90   95

Tyr Leu Pro Pro Pro Leu Leu Val Pro Pro Pro Gly Arg Leu Ala Ala
             100   105   110

Glu Ser Asp Thr Gly Xaa Xaa Lys Xaa Xaa Xaa Glu Pro Trp Tyr Pro
             115   120   125

Ile Leu Gly Pro Gly Pro Xaa Leu Gly Pro Asn Pro Ser Ser Val Asp
     130   135   140

Asn Gly Val Trp Asn Lys Cys Cys Leu Ser Xaa Gln Gln Lys Lys Lys
145   150   155   160

Lys Arg Gly Gly Arg Phe Arg Gly Phe Lys Ala
                 165   170

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<210> 1628
<211> 120
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1628
Arg Pro Ala Arg Ser Pro Ala Glu Val Gly Ser Arg Gly Leu Ser Ser
  1               5                  10                  15

Pro Pro Arg Ala His His Arg Pro Val Ser Pro Ala Ala Pro Gly Arg
             20                  25                  30

Trp Ser Thr Ser Ala Arg Val Arg Thr Arg Lys Met Val Asn Tyr Ala
         35                  40                  45

Trp Ala Gly Arg Xaa Arg Arg Lys Leu Trp Trp Arg Ser Val Ala Val
     50                  55                  60

Leu Thr Cys Lys Ser Val Val Arg Pro Gly Tyr Arg Gly Glu Arg Leu
 65                  70                  75                  80

Asn Arg Thr Ile Leu Val Ser Trp Phe Pro Ser Glu Xaa Phe Pro Gln
                 85                  90                  95
```

```
Asp Lys Leu Gly Ala Leu Ala Arg Pro Arg Arg Asn Pro Xaa Xaa Gly
            100                 105             110

Ile Phe Ile Arg Xaa Lys Arg Ile
            115                 120



<210> 1629
<211> 86
<212> PRT
<213> Homo sapiens

<400> 1629
Asn Leu Val Pro Gly Ser Ser Ala Thr Tyr Ile Ser Leu Ser Ser Cys
 1               5                  10                  15

Cys Phe Val Lys Arg Lys Arg Lys Lys Pro Lys Leu Val Arg Val
            20                  25                  30

Ile Ser Asn Tyr Leu Ile Phe Cys Arg Ser Val Ile Lys Asn Leu Val
            35                  40                  45

Ile Pro Ser Thr Ser Tyr Cys Glu Glu Gln Thr Leu Gly Pro Thr Leu
    50                  55                  60

Lys Ser Pro Leu Val Thr His Ser His Pro Pro Gly Ser Cys Leu Pro
65                  70                  75                  80

Gly Arg Gly Cys Arg Lys
                    85



<210> 1630
<211> 35
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1630
Leu Lys Lys Lys Phe Pro Glu Glu Glu Lys Lys Thr Thr Lys Asn Lys
 1               5                  10                  15

Thr Leu Lys Val Asp Ile Leu Cys Gly Xaa Thr Phe Glu Leu Asn Ser
            20                  25                  30
```

Glu Phe Phe
          35

<210> 1631
<211> 40
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
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<220>
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<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1631
His Glu Gln Pro Thr Ala Ala Cys Ile Cys Ile Xaa Arg Gln Val Pro
 1   5   10   15

Pro Val Pro Ala Ala Arg Xaa Pro Gln Ser Arg Thr Xaa Ser Xaa Gln
              20   25   30

Ala Lys Leu Ala Leu Thr Met Pro
          35   40

<210> 1632
<211> 97
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (26)
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<220>
<221> SITE
<222> (41)
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<220>
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<220>
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<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 1632
Xaa Ser Gly Ser Pro Gly Pro Ala Gly Pro Arg Gly Pro Val Gly Pro
 1               5                  10    `             15


Xaa Gly Pro Pro Gly Lys Asp Gly Thr Xaa Gly His Pro Gly Ala Ile
            20              25              30


Gly Pro Pro Gly Pro Arg Gly Asn Xaa Gly Glu Xaa Gly Ser Xaa Gly
        35              40              45


Ser Pro Gly Pro Xaa Arg Ala Thr Arg Ala Leu Leu Xaa Pro Pro Gly
    50              55              60


Ala Pro Gly Pro Cys Cys Gly Gly Val Xaa Ala Ala Ala Ile Ala Gly
    65              70              75              80


Ile Gly Arg Leu Lys Lys Leu Gly Arg Phe Xaa Pro Arg Val Xaa Trp
            85              90              95


Gly
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<210> 1633
<211> 43
<212> PRT
<213> Homo sapiens

<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1633
Glu Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 1               5                  10                  15

Lys Lys Lys Lys Lys Lys Lys Lys Lys Gly Arg Pro Phe Xaa Arg
              20                  25                  30

Ile Gln Xaa Tyr Val Xaa Xaa Xaa Ala Thr Ser
          35                  40


<210> 1634
<211> 88
<212> PRT
<213> Homo sapiens

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<222> (82)
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<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1634
Ala Arg Ala Ala Leu Ser Ala Thr Lys Thr Cys Arg Pro Ala Phe Arg
 1               5                  10                  15

Gly Ala Ser Ala Ala Pro Arg Gly Gly Gly Pro Ala Arg Ser Pro Gly
              20                  25                  30

Arg Val Leu Gly Arg His Ala Ala Gly Ser Leu Ala Arg Leu Val Gly
          35                  40                  45

Arg Ser Arg Gly Phe Trp Leu Leu Gly Gly Glu Val Lys Ser Phe Cys
      50                  55                  60

Arg Cys Trp Gly Arg Arg Thr Arg Arg Glu Arg Lys Lys Lys Lys Lys
 65                  70                  75                  80

Lys Xaa Leu Gly Lys Tyr Phe Xaa
              85
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<210> 1635
<211> 105
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1635
Tyr Ser His Ser Gly Phe Cys Ser Pro Thr Asp Glu Asp Arg Cys Thr
 1               5                  10                  15

Asn Glu Ala Asp Gly Asn His Pro Val Glu Val His Leu Arg Ser Asp
            20                  25                  30

Pro Asp Asp Ala Arg Ala Met Thr Gly Pro Ala Gly Val Ala Pro Arg
            35                  40                  45

Gly Asp Gln Pro Trp Ser Ser His Arg Arg Lys Pro Leu Arg Ser Gly
        50                  55                  60

Lys Arg Arg Arg Lys Xaa Lys Trp Gln Lys Gln Lys Glu Pro Gln Ser
 65                  70                  75                  80

Ser Ile Gly Asp His Ser Met His Phe Leu Pro Ala Ala Thr Gln Thr
                85                  90                  95

Leu Pro Glu Leu Leu Xaa Asn Leu Met
            100                 105



<210> 1636
<211> 47
<212> PRT
<213> Homo sapiens

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<222> (5)
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<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids


<400> 1636
Gln Arg Pro Arg Xaa Xaa Gly Thr Gly Ser Gly Pro Pro Gly Pro Gly
 1               5                  10                  15


Lys Ala Ser His Gly Gly Gly Ala Pro Val Ser Arg Ser Gly Thr Gly
             20              25                  30


Ser Glu Asp Gly Arg Glu Ser Arg Ala Thr Val Val Val Xaa Cys
         35              40                  45




<210> 1637
<211> 55
<212> PRT
<213> Homo sapiens

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<222> (16)
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<220>
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<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1637
Gly Asp Pro Pro Glu Gly Pro Ala Thr Ser Pro Leu Thr Asn Ser Xaa
 1               5                  10                  15


His Pro Xaa Ser Xaa Gly Thr Ala Ala Ala Thr Gln Arg Arg Xaa Ser
            20                  25                  30


Glu Gln Gly Gly Arg Xaa Thr Cys Gly Pro Ala Gly Ala Gly Ser Pro
        35                  40                  45


Xaa Xaa Pro Pro Arg Ala Xaa
    50                  55




<210> 1638
<211> 55
<212> PRT
<213> Homo sapiens

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<222> (7)
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<222> (18)
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<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (20)
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<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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·<222> (41)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1638
Ile Arg Xaa His Ala Thr Xaa Tyr Arg Gly Xaa Phe Cys Xaa Arg Arg
 1               5               10               15


Thr Xaa Xaa Xaa Leu His Ser Ala Asn Val Thr Thr Xaa Xaa Leu Leu
            20               25               30


Leu Xaa Xaa Phe Tyr Xaa Xaa Arg Xaa Xaa Ala Xaa Val Asn Ile Ser
        35               40               45


Xaa Val Pro His Cys Pro Ile
     50               55




<210> 1639
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1639
Ile Cys Pro Gln Asn Pro Leu Asn Pro Leu Val Asn Leu Thr Xaa Ser
 1               5               10               15
```

```
Pro Lys Arg Asn Ser Ser Leu Asp Thr Arg Lys Lys Pro Cys Arg Glu
            20                  25              30

Ser Lys Lys Phe Asn Thr His Ser Arg Pro Lys Ser Ser His Gln Leu
            35                  40              45

Arg Lys Arg Ser Ser Xaa Thr Pro Thr Thr
        50              55
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<210> 1640
<211> 37
<212> PRT
<213> Homo sapiens

<220>
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<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1640
Met Cys Val Asp Cys Met Asn Asp Leu Glu Lys Lys Lys Lys Lys Lys
 1           5              10              15

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Xaa Pro Xaa
            20                  25              30

Gly Xaa Pro Xaa Pro
        35
```

```
<210> 1641
<211> 41
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<212> PRT
<213> Homo sapiens

<400> 1641
Tyr Val Trp Leu Gly His Phe Val Ala Lys Val Arg Thr Cys Leu Trp
 1               5                10                15


Lys Thr Ser Leu Trp Leu Gly Glu Ser Val Trp Pro Ala Ala Ser Asp
            20                25                30


Leu Cys Arg Val Leu Thr Cys Gln Gly
         35                40




<210> 1642
<211> 99
<212> PRT
<213> Homo sapiens

<220>
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<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (26)
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<220>
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<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1642
Xaa Pro Ala Ala Ser Tyr Leu Met Thr Leu Met Glu Pro Leu Ser Leu
 1               5                  10                  15

Ile Xaa Xaa Xaa Leu Ser Pro Pro Leu Xaa Xaa Ser Lys Glu Asn His
            20              25                  30

Phe Asp Ala Arg Ser Cys Leu Xaa Ser Xaa Pro Lys Cys Ser Cys Ser
        35              40                  45

Xaa Pro Xaa Pro Gly Ile Ser Leu Pro Arg Asp Lys Ser Ala Ser Glu
    50              55                  60

Ile Leu His Asp Ser Leu Cys Phe Gln Asn Pro Gly Leu Phe Cys Ile
65              70                  75                  80

Ser Ser Phe Leu Gly Pro Ala Ser Cys Val Pro Leu Lys Gly Xaa Trp
            85              90                  95

Ala Lys Thr

<210> 1643
<211> 42
<212> PRT
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<213> Homo sapiens

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<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1643
Lys Xaa Pro Xaa Asn Leu Gly Lys Ala Arg Leu Gln Val Pro Val Arg
 1               5                  10                  15

Asn Ser Arg Val Asp Leu Arg Val Phe Ile Tyr Ile Asp Ile Tyr Ile
                20                  25                  30

Asp Ile Tyr Arg Tyr Ile Tyr Arg Tyr Ile
                35                  40


<210> 1644
<211> 46
<212> PRT
<213> Homo sapiens

<220>
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<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1644
Arg Val Gly Val Arg Leu Ala Gln Val Pro Xaa His Leu Thr Ser Arg
 1   5   10   15

Ser His His Pro His Pro Val Phe His Xaa Arg Leu Lys Ala Thr Met
            20   25   30

Arg Met Xaa His Thr Glu Ala Xaa Met Xaa Xaa Asn His Leu
        35   40   45

<210> 1645
<211> 69
<212> PRT
<213> Homo sapiens

<400> 1645
His Val Arg Leu Lys Pro Ile Phe Ser Pro Phe Phe Leu Leu Phe Ser
 1   5   10   15

Leu Ala Ala His Ile Val Pro Leu Phe Tyr Glu Pro Gln Phe Ser Gly
            20   25   30

Leu Ser Leu Lys Lys Lys Ser Ser Leu Asn Ile Ala Phe Arg Lys Leu
            35   40   45

Leu Phe Leu Asp Lys Lys Ser Tyr Thr Leu Lys Lys Lys Lys Thr Phe
        50   55   60

Ser Arg Lys Ile Tyr
 65

<210> 1646
<211> 78
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (42)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (43)
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<222> (54)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1646
Ile Ile Cys Phe Val Leu Ser Phe Ile Tyr His Phe Phe Leu Tyr Lys
 1   5   10   15

Ser Ile Ile Ser Arg Phe Leu Tyr Tyr Met Ile Asp Ile Asn Trp Val
             20   25   30

Ile Ser Ser Arg Gln Phe Val Phe Ser Xaa Xaa Pro Pro Ser Thr Val
             35   40   45

Ser Gln Arg Pro Asp Xaa Val Gly Lys Val Phe Phe Leu Arg Ile Val
     50   55   60

Lys Gly Ser Xaa Gln Leu Gly Leu Ile Lys Ala Xaa Xaa Pro
 65   70   75

<210> 1647
<211> 58
<212> PRT
<213> Homo sapiens

<400> 1647

```
Il  Cys Pro Gln Asn Pro Leu Asn Pro Leu Val Asn Leu Thr Val Ser
 1               5               10              15

Pro Lys Arg Asn Ser Ser Leu Asp Thr Arg Lys Lys Pro Cys Arg Glu
            20              25              30

Ser Lys Lys Phe Asn Thr His Ser Arg Pro Lys Ser Ser His Gln Leu
            35              40              45

Arg Lys Arg Ser Ser Ser Thr Pro Thr Thr
        50              55
```

<210> 1648
<211> 59
<212> PRT
<213> Homo sapiens

<400> 1648
```
Cys Leu Phe Leu Leu Pro Val Met Leu Leu Gln Ile His Ile Ser Arg
 1               5               10              15

Ser Thr Val Asn Val Ser Thr Ser Arg Gly Thr Pro Pro Ser Thr Leu
            20              25              30

Ser Val Lys Gly Gln Asn Glu Thr Val Arg Val Lys Gly Thr Gly Arg
            35              40              45

Lys Phe Ala Cys Leu Gln Val Thr Arg Ile Arg
        50              55
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<210> 1649
<211> 110
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (66)
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<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1649
Val Pro Pro Pro Val Pro Trp Gly Gly Pro Xaa Arg Glu Gly Glu Val
 1               5                  10                  15

Ser His Thr Lys Ala Asp Ala Pro Leu Val Gly Gly Xaa Trp Pro Gly
            20              25                  30

Lys Ile Glu Gly Cys Ala Gly Leu Pro Leu Arg Ala Ala Gln Thr Ala
        35              40              45

Leu Met Cys Gly Gly Xaa Ala Arg Trp Val Arg Ala Gln Glu Val Ala
    50              55                  60

Pro Xaa Thr Val Ala Asp Xaa Leu Pro Arg Val Pro Gly Ser Ser Leu
65              70                  75                  80

Tyr Pro Trp Tyr Ala Xaa Asn Xaa Trp Phe Pro His Pro Xaa Ala Ala
            85              90                  95

Lys Ser Leu Phe Pro Trp Ile Ser Gln Ala Lys Leu Gly Leu
            100             105             110
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<210> 1650
<211> 74
<212> PRT
<213> Homo sapiens

<220>
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<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1650
Ser Pro Glu Gly Leu Ser Leu Leu Ala Pro Xaa Pro Gly Arg Ala Pro
 1               5                  10                  15


Ala Gly Pro Thr Pro Leu Arg Gly Gln Cys Gln Xaa Gly Ser Leu Thr
            20                  25                  30


Gly Ala Val His Leu Ser Asn Gly Asn Ala Gly Val Leu Arg Arg Ala
        35                  40                  45


Gln Gly Gly Gln Lys Pro Pro Val Glu Gln Lys Gly Lys Ser Ser Leu
    50                  55                  60


Asp Leu His Phe Gln Tyr Glu Tyr Arg Pro
65                  70



<210> 1651
<211> 83
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (30)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (51)
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<222> (52)
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<222> (62)
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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1651
Asn Lys Gly Gly Gly Arg Met Met Thr Tyr Pro Glu Val Leu Pro Leu
  1   5   10   15

Thr Ala Arg Thr Gly Ala Cys Ser Val Pro Trp Glu His Xaa Ala Gln
            20   25   30

Leu Ser Gly Val Gln Ala Val Gly Ser Phe Pro Asn Xaa Ser Ile Ser
            35   40   45

Xaa Pro Xaa Xaa Leu Lys Pro Val Gly Gln Ile Ser Lys Xaa Leu Xaa
      50   55   60

Xaa Arg Xaa Pro Phe Thr Asn Pro Arg Phe Cys Gly Gln Cys Pro Lys
  65   70   75   80

Gly Val Gly

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<210> 1652
<211> 90
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1652
Phe Phe Phe Phe Leu Asp Val Lys Gly Ile Xaa Phe Gln Arg Leu Leu
 1               5                   10                  15
```

1712

```
Glu Ser Leu Val Tyr Thr Asp Glu Gly Val Arg Cys Cys Phe Pro Ser
            20                  25                  30

Glu Ser Ser Ala Ser Thr Glu Ile Xaa Leu Xaa Leu Ile Phe Asp Ile
            35                  40                  45

Leu His Cys Leu Leu Xaa Xaa Xaa Arg Ser Phe Leu Pro Phe Thr Ser
       50                  55                  60

Pro Ser Asn Tyr Val Gln Met Cys Arg Leu Leu Xaa Ser Gly Leu Ser
65                  70                  75                  80

Pro Lys Ala Leu Thr Leu Gly Leu Xaa Phe
                85                  90
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<210> 1653
<211> 55
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1653
```
Lys Leu Trp Phe Val Phe Val Phe Cys Leu Phe His Leu Phe Pro Ser
  1               5                  10                  15
```

```
Gln Pro Gln Thr Phe Cys Ser Leu Arg Glu Leu Thr Phe Pro Phe Phe
            20                  25              30

Phe Leu Phe Phe Phe Phe Gly Xaa Leu Xaa Val Xaa Asn Lys Ile Xaa
        35                  40              45

Xaa Ala Ile Lys Lys Lys Lys
    50                  55
```

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<210> 1654
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1654
Val Xaa Ala Thr Asn Leu Pro Ser Leu Val Ile Ala Xaa Cys Ser Xaa
 1               5                  10                  15


Ile Glu Ser Leu Val Pro Leu Leu Ile Trp Pro Gln Lys Pro Pro Asn
            20                  25                  30


Ser Pro Trp Leu Ile Leu Thr Val Xaa Pro Lys Lys Gly Thr Xaa Ser
            35                  40                  45


Leu Gly Pro Leu Xaa Lys Lys Thr Leu Xaa Lys Xaa Asn
    50                  55                  60



<210> 1655
<211> 20
<212> PRT
<213> Homo sapiens

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<400> 1655
Ala Ala Val Leu Gln Thr Ala Arg Arg Ala Arg Ser Ala Cys Arg Leu
 1               5                  10                  15

Xaa Xaa Xaa Xaa
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20

<210> 1656
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<212> PRT
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<400> 1656
Ala Asp Ile Gln Thr Glu Arg Ala Tyr Gln Lys Xaa Xaa Thr Ile Phe
 1   5   10   15

Xaa Asn Xaa Lys Arg Val Leu Leu
               20

<210> 1657
<211> 34
<212> PRT
<213> Homo sapiens

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1716

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1657
Ala Ala Ala Cys Leu Pro Ala Thr Glu Xaa Ser Gln His His Glu Gly
 1   5   10   15

Leu Asp Leu Leu Ser Pro Leu Pro Gly Arg Glu Gly Leu Gly Xaa Pro
            20   ·25   30

Ser Xaa

<210> 1658
<211> 51
<212> PRT
<213> Homo sapiens

<400> 1658
Cys Lys Gln Tyr Leu Thr Asn Pro Gln Val Leu Asn Tyr Gln Thr Cys
 1   5   10   15

Ile Lys Asn Phe Gly Trp Gly Asp Leu Gly Ala Glu Pro Asn Leu Arg
            20   25   30

Ala Val His Ala Lys Thr Ser Pro Val Lys Ala Asn Tyr Tyr Thr Gln
        35   40   45

Leu Ile Gln
     50

<210> 1659
<211> 166
<212> PRT
<213> Homo sapiens

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<400> 1659
Ser Thr His Ala Ser Gly His Ser His Ser Gln Ala Ser Leu Ala Gly
 1               5                  10                  15

Ser Arg Val Ala Arg Val Arg Cys Leu Leu Gln Leu Gln Asp Asp Arg
            20                  25                  30

Pro Glu Asp Ala Leu Leu Leu Phe Leu Pro Gln Pro Arg Gln Glu Ala
            35                  40                  45

Thr Xaa Pro Gln Xaa Pro Ser Arg Pro Ser Arg Gly Pro Xaa Trp Leu
    50                  55                  60

Gly Leu Leu Lys Lys Ala Glu Xaa Gly Gly His Pro Ser Gln Glu Xaa
65                  70                  75                  80

Pro Gly Trp Xaa Gly Glu Xaa Xaa Glu Arg Arg Pro Pro Trp Xaa Leu
            85                  90                  95

Asn Xaa Arg Thr Phe Trp Asn Arg Ile Pro Glu Glu Gln Arg Ala Arg
            100                 105                 110

Gly Pro Xaa Leu Xaa Xaa Arg Gly Pro Xaa Xaa Val Xaa Pro Trp Gly
        115                 120                 125

Phe Leu Glu Xaa Xaa Pro Gly Lys Glu Ser Xaa Leu Arg Gly Gly Xaa
    130                 135                 140

Phe Arg Gly Lys Xaa Leu Phe Leu Ile Lys Ala Lys Leu Gly Ile Xaa
145                 150                 155                 160

Phe Xaa Lys Arg Lys Gly
                165


<210> 1660
<211> 68
<212> PRT
<213> Homo sapiens

<220>
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<220>
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<222> (12)
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<222> (20)
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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
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<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1660
Ser Pro Gly Leu Gln Glu Phe Gly Xaa Arg Gly Xaa Arg Asn Arg Leu
 1               5                  10                  15

Asn Tyr Ala Xaa Xaa His His Xaa Xaa Pro His Arg Xaa Ser Ile Pro
             20              25                  30

Thr His Ala Leu His Ser Xaa Arg Gly Asp Asp Ala Xaa Leu Thr Ile
         35              40                  45

Lys Ile Xaa Xaa Pro Pro Met Val Leu Glu Pro Thr Ser Thr Pro Asp
     50              55                  60

His Xaa Val Asp
 65


<210> 1661
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1661
Leu Asn Ala Asp Thr Leu Met Asn Asp Gln Gln Gln Leu Ser Ala Leu
 1               5                  10                  15

Lys Lys Thr Leu Ile Phe Glu Phe Thr Cys Trp Val Pro Gly Ser Asn
             20              25                  30

Gly Gly Lys Arg Pro Leu Phe Ile Lys Arg Gly Pro Pro Phe Xaa Xaa
```

1722

```
                35                    40                    45

   Pro Lys Asp Phe Leu Xaa Phe Gln Ile Gly Lys Gly Thr
        50                    55                    60




   <210> 1662
   <211> 54
   <212> PRT
   <213> Homo sapiens

   <220>
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   <222> (3)
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   <221> SITE
   <222> (19)
   <223> Xaa equals any of the naturally occurring L-amino acids

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   <222> (22)
   <223> Xaa equals any of the naturally occurring L-amino acids

   <220>
   <221> SITE
   <222> (27)
   <223> Xaa equals any of the naturally occurring L-amino acids

   <220>
   <221> SITE
   <222> (47)
   <223> Xaa equals any of the naturally occurring L-amino acids

   <400> 1662
   Thr Val Xaa Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Asn Leu
    1                5                   10                   15


   Glu Val Xaa Gly Ile Xaa Asn Leu Asp Ile Xaa Phe Gly Thr Ser Asn
                20                   25                   30


   Pro His Ser Pro Thr His Ala Gly Gly Cys Ala Cys Arg Thr Xaa Leu
            35                   40                   45


   Thr Asp Trp Trp Ile Leu
        50
```

<210> 1663
<211> 95
<212> PRT
<213> Homo sapiens

<400> 1663
Ala Arg Glu Lys Leu Cys Val Arg Gly Arg Gly Leu Phe Arg Cys Arg
 1   5   10   15

Val Ser Ser Ser Cys Thr Leu Phe Lys Ser Leu His Trp Arg Asn Ser
            20   25   30

Ala Ile Thr Ser Ser Leu Val Ala Glu Gly Arg Gly Asn Ile His Leu
            35   40   45

Phe Met Pro Val Cys Cys Met Gln Ala Phe Trp Leu Pro Thr Leu Gln
        50   55   60

Gln Asn Asn Cys Thr Asn Ser Leu Val Pro Ile Pro Pro Thr Glu Ser
65   70   75   80

Pro Gly Ala Thr Val Phe Phe Ala Leu His Cys Lys Glu Arg Asp
                85   90   95

<210> 1664
<211> 100
<212> PRT
<213> Homo sapiens

<220>
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<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1664
```
Val Asn Gln Glu Thr Thr Pro Val Asp Cys Gly Ala Leu Glu Gly Leu
 1               5               10                  15

Val Gly Val Asn Leu Pro Thr Pro Tyr Asn Cys Gly Arg Ile Gln Lys
            20              25                  30

Ser Leu Ser Phe Tyr Ile His Ser Leu Asp Val Ile Gly Pro Leu Pro
        35              40                  45

Pro Ile Ser Leu Arg Cys His Ala Ser Met Gly Ser Gly Val Val Arg
    50              55                  60

Lys Asn Lys Arg Arg Xaa Asp Ser Leu Val Met Asp Lys Ile Leu Thr
 65              70                  75                  80

Thr Val Phe Pro Xaa Gly Ile Pro Tyr Xaa Xaa Phe Asn Phe Phe Phe
            85              90                  95

Ser Leu Lys Asn
            100
```

<210> 1665
<211> 33
<212> PRT
<213> Homo sapiens

<220>
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<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>

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<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1665
Ser Ala Pro Gly Gly Ser Cys Tyr Ser Gly Xaa Pro Arg Val Pro Lys
 1               5                   10                  15

Cys Xaa Ile Gln Xaa Asp Pro Xaa Ser Xaa Pro Pro Cys Leu Gln Leu
            20                  25                  30

Val
```

```
<210> 1666
<211> 47
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1666
Gly Arg Val Gly Gly Arg Val Gly Gly Arg Val Gly Arg Glu Pro Gln
 1               5                   10                  15

Val Tyr Thr Leu Pro Pro Ser Arg Glu Xaa Met Thr Lys Lys Gln Ser
            20                  25                  30

Ala Glu Leu Pro Xaa Ser Xaa Gly Phe Tyr Pro Thr Lys Ser Pro
        35                  40                  45
```

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<210> 1667
<211> 34
<212> PRT
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<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1667
Leu Glu Ile Thr Leu Gln Gly Glu Pro Lys Leu Arg Pro Pro Lys Pro
 1   5   10   15

Glu Arg Ala Thr Leu Glu Gln Leu Lys Glu His Thr Pro Leu Phe Leu
            20   25   30

Pro Xaa

<210> 1668
<211> 41
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1668
Ile Cys Pro Gln Asn Pro Leu Asn Pro Leu Val Asn Leu Thr Val Xaa

1727

```
    1                5               10              15

Pro Lys Arg Asn Lys Leu Phe Gly His Xaa Glu Lys Thr Leu Tyr Arg
            20              25              30

Glu Glu Xaa Xaa Phe Xaa Asn Pro Tyr
        35          40
```

<210> 1669
<211> 96
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (77)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1669
```
Gly Arg Ala Leu Pro Gly Arg Val Arg Ala Ala Thr Gly Glu Gly Arg
  1               5               10              15

Thr Phe Val Xaa Asn Gly Thr Val Leu Leu Ala Pro Pro Arg Gly Gly
            20              25              30

Pro Leu Val Ser Pro Leu Pro Ala Arg Arg Arg Cys Val Trp Glu Gly
        35              40              45

Val Gly Cys Gly Pro Arg Pro Asp Leu Ala Val Pro Pro Ala Ala Phe
    50              55              60

Cys Val Ala Gly Ala Gly Arg Arg Gly Pro Leu Thr Xaa Gln Thr Ala
65              70              75              80
```

Leu Ala Val Xaa Ser Ser Gly Xaa Arg Leu Ala Gly Gly Thr Pro Thr
              85   90   95

<210> 1670
<211> 140
<212> PRT
<213> Homo sapiens

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<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1670
Gly Ser Thr His Ala Ser Gly Ser Thr Glu Lys Glu Gly Leu Leu His
 1   5   10   15

Glu Ala Thr Leu Ser Val His Gln Gly Leu Gly Leu Arg Gly Pro Trp
              20   25   30

Ser Ser Cys Ser Ser Pro Ala Pro Pro Trp Met His Cys Cys Arg Ala
          35   40   45

Glu Xaa Pro Leu Pro Gly Pro Ala Leu Gly Phe Leu Glu Thr Ser Phe
      50   55   60

Ser Phe Ala Ile Phe Phe Lys Trp Glu Lys Gly Gly Gln Leu Ser Leu
 65   70   75   80

Gly Lys Arg Gly Pro Ala Thr Cys Pro Ala Trp Ala Pro Glu Pro Ser
              85   90   95

```
Ser Leu Thr Gly Gln Ser Leu Val Gly Lys Ala Ala Ser Trp Pro Xaa
            100                 105                 110

Ser Leu Leu Met Phe Leu Val Ser Arg Val Gln Ser Gln Leu Phe Xaa
            115                 120                 125

Phe Leu Val Val Pro Val Xaa Glu Ala Phe Gln Asn
    130                 135                 140
```

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<210> 1671
<211> 34
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1671
His Xaa Xaa Met Glu Ser Asp Lys Met Val Thr Gly Ser Trp Gly Pro
 1               5                   10                  15

Arg Leu Ser Xaa His Glu Gly Cys Ser Ala Xaa Cys Ile Ser Val Tyr
            20                  25                  30

Val Val
```

```
<210> 1672
<211> 113
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<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1672
Arg Xaa Leu Leu Thr Ile Xaa Glu Ser Trp Tyr Xaa Cys Arg Tyr Arg
 1   5   10   15

Ser Gly Ile Pro Gly Gly Ile Pro Leu Ser Pro Arg Asp Pro Thr Leu
            20   25   30

Ala Ser Trp Pro Thr Arg Ser Arg Glu Ser Leu Arg Glu Arg Arg Arg
            35   40   45

Ser Arg Ala Ala Ser Gly Leu Gly Ile Arg Pro Leu Gly Pro Pro Leu
        50   55   60

Val Ser Arg Val Gly Arg Asn Arg Arg Leu Ala His Leu Ala Trp Val
65   70   75   80

Cys Pro His Val Val Ile Val Gln Ile Asn Ala His Ser Glu Leu Ala
            85   90   95

Val Tyr Phe Leu Lys Phe Asn Ile Val Phe Val Ile Leu Lys Tyr Leu
            100   105   110

Leu

<210> 1673
<211> 86
<212> PRT
<213> Homo sapiens

<220>

<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1673
Pro Ala Phe Asn Phe Asp Pro Leu Phe Phe Leu Phe Val Arg Cys Thr
 1   5   10   15

Arg Leu Pro Ser Cys Phe Ser Leu Leu Ser Cys His Gln Pro Phe Leu
                20   25   30

Leu Gly Gly His Val Leu Gly Lys Arg Pro His Asp Leu Ser Gly Ser
            35   40   45

Thr Gln Cys Leu Arg His Pro Ala Ser Phe Ala Cys Ile Pro Gln Thr
        50   55   60

Ile Ser Leu Ile Leu Phe Thr Ala Ala Asn Leu Ser Leu Val Asp Glu
65   70   75   80

Thr Val Phe Ile Xaa Leu
                85

<210> 1674
<211> 56
<212> PRT
<213> Homo sapiens

<400> 1674
Ser Asp Tyr Glu Leu Leu Phe Lys Arg Lys Met Leu Phe Ile His Ala
 1   5   10   15

Glu Val Ile Gln Phe Pro Pro Ser Tyr Arg Ser Ile Leu Ile His Pro
                20   25   30

Thr Leu Glu Met Gln His Leu Cys Gly Arg Leu Phe His Lys Pro Pro
            35   40   45

Arg Leu Leu Arg Leu Gly Arg Tyr
        50   55

<210> 1675
<211> 65
<212> PRT
<213> Homo sapiens

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<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1675
Leu Val Cys Ile Leu Pro Lys Val Arg Xaa Pro Thr Leu Gly Ile Thr
 1   5   10   15

Leu Leu Ile Val Ile Leu Val Xaa Ile Leu Pro Gly Val Met Tyr Ser
              20   25   30

Leu Lys Ala Leu Asn Val Cys Ile Ala Thr Xaa His Gln Ile Leu Asn
         35   40   45

Gly Leu Ser Phe Gly Trp Asn Tyr Lys Leu Lys Lys Cys Phe Ser Gly
      50   55   60

Lys
 65

<210> 1676
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1676
Pro Thr Glu Gln Val Thr Leu Gly Ile Thr Ala Gln Ser Tyr Ser Arg
 1   5   10   15

Val His Ile Asn Asn Arg Val Tyr Asp Leu Asp Val Gly Ser Gly His
              20   25   30

Pro Asp Gly Ala Ala Ala Ile Lys Gly Ser Ph Xaa Gln Arg L u Lys
         35   40   45

Ser Tyr Val Ile
      50

<210> 1677
<211> 40
<212> PRT
<213> Homo sapiens

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1677
Xaa Xaa Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Xaa Lys Lys
 1   5   10   15

Lys Lys Lys Lys Lys Lys Gly Gly Arg Xaa Lys Gly Ser Lys Leu Thr

1734

```
                      20                25                30

        Tyr Xaa Cys Met Xaa Arg Xaa Ser
                35                40




        <210> 1678
        <211> 49
        <212> PRT
        <213> Homo sapiens

        <400> 1678
        Thr Ala Ala Met Ser Ile Phe Thr Pro Thr Asn Gln Ile Arg Leu Thr
         1               5                10                15

        Asn Val Ala Val Val Arg Met Lys Arg Ala Arg Lys Arg Phe Glu Ile
                    20                25                30

        Ala Cys Tyr Arg Asn Lys Ser Ser Ala Gly Gly Gly Leu Trp Lys Lys
                35                40                45

        Thr




        <210> 1679
        <211> 51
        <212> PRT
        <213> Homo sapiens

        <400> 1679
        Ala Ala Ala Gln Gln Val Val Asp Gln Ala Thr Glu Ala Gly Gln Lys
         1               5                10                15

        Ala Met Asp Gln Leu Ala Lys Thr Thr Gln Glu Thr Ile Asp Lys Thr
                    20                25                30

        Ala Asn Gln Ala Ser Asp Thr Phe Ser Gly Ile Gly Lys Lys Phe Gly
                35                40                45

        Leu Leu Lys
            50




        <210> 1680
        <211> 41
        <212> PRT
        <213> Homo sapiens
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```
<400> 1680
Ala Phe Asn Arg Ser Gln Arg Gly Ser Cys Ser Ala Thr Tyr Glu Thr
 1               5                   10                  15


Pro Thr Gln Lys Gln Val Val Tyr Glu Trp Phe Ser Ala Arg Phe Pro
                20                  25                  30


Thr Asn Val Arg Cys Val Thr Gly Glu
            35                  40



<210> 1681
<211> 34
<212> PRT
<213> Homo sapiens

<220>
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<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1681
Gly Xaa Gly Val Arg Val Asn Val Arg Thr Ser Ala Gly Cys Ser Pro
 1               5                   10                  15


His Pro Asn Pro Leu Pro Lys Gly Arg Arg Gly Pro Val Thr Gln Phe
                20                  25                  30


Ala Leu



<210> 1682
<211> 85
<212> PRT
<213> Homo sapiens

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<222> (71)
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<220>
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<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 1682
Ala Ser Asn Ser Asn Tyr Ala Leu Ile Gly Ala Leu Arg Ala Val Ala
 1   5   10   15

Gln Thr Ile Ser Tyr Glu Val Thr Leu Ala Ile Ile Pro Thr Ile Asn
            20   25   30

Ile Thr Asn Xaa Leu Ala Pro Leu Thr Ser Pro Pro Leu Ser Gln His
         35   40   45

Lys Asn Thr Pro Glu Tyr Pro Ala Ile Ile Thr Leu Trp Pro Tyr Xaa
    50   55   60

Ile Ile Phe His Thr Arg Xaa Asn Asn Glu Pro Pro Ser Xaa Leu Xaa
65   70   75   80

Lys Gly Asn Phe Xaa
                85

<210> 1683
<211> 53
<212> PRT
<213> Homo sapiens

<400> 1683
Val Gly Leu Glu Ile Asn Met Leu Ala Phe Ile Pro Val Leu Thr Lys
 1   5   10   15

Lys Ile Asn Pro Arg Ser Thr Glu Ala Ala Ile Lys Tyr Phe Leu Thr
            20   25   30

Gln Ala Thr Ala Ser Ile Ile Leu Leu Ile Ala Il   Leu Phe Asn Asn
          35   40   45

Ile Leu Ser Gly Gln
        50

<210> 1684
<211> 169
<212> PRT
<213> Homo sapiens

<220>
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<220>
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<222> (154)
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<222> (156)
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<220>
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<400> 1684
Pro Val Ser Ala Lys Lys Glu Lys Lys Val Ser Cys Met Phe Ile Pro
  1   5   10   15

Asp Gly Arg Val Ser Val Ser Ala Arg Ile Asp Arg Lys Gly Phe Cys
              20   25   30

Glu Gly Asp Glu Ile Ser Ile His Ala Asp Phe Glu Asn Thr Cys Ser
          35   40   45

Arg Ile Val Val Pro Lys Ala Ala Ile Val Ala Arg His Thr Tyr Leu
      50   55   60

1738


```
Ala Asn Gly Gln Thr Lys Val Leu Thr Gln Lys Leu Ser Ser Val Arg
 65              70              75                  80

Gly Asn His Ile Ile Ser Gly Thr Cys Ala Ser Trp Arg Gly Lys Ser
                85                  90                  95

Leu Arg Val Gln Lys Ile Arg Pro Ser Ile Leu Gly Cys Asn Ile Leu
             100             105             110

Arg Val Glu Tyr Ser Leu Leu Ile Tyr Val Ser Val Pro Gly Ser Lys
         115             120             125

Lys Val Ile Leu Asp Leu Pro Leu Val Ile Gly Ser Arg Ser Gly Leu
     130             135             140

Ser Xaa Arg Thr Ser Ser Trp Xaa Ala Xaa Thr Xaa Ser Glu Asp Glu
145             150             155             160

Xaa Gly Arg Ser Glu His Pro Asp Thr
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<210> 1685
<211> 733
<212> DNA
<213> Homo sapiens

<400> 1685
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aattcgaggg tgcaccgtca gtcttcctct tcccccccaaa acccaaggac accctcatga 120
tctcccggac tcctgaggtc acatgcgtgg tggtggacgt aagccacgaa gaccctgagg 180
tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240
aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300
ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca accccatcg 360
agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc 420
catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct 480
atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga 540
ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg 600
acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc 660
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gactctagag gat                                                  733
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<213> Homo sapiens

1739

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  1                 5


<210> 1687
<211> 86
<212> DNA
<213> Homo sapiens


<400> 1687
gcgcctcgag atttcccga aatctagatt tccccgaaat gatttccccg aaatgatttc 60
cccgaaatat ctgccatctc aattag                                      86


<210> 1688
<211> 27
<212> DNA
<213> Homo sapiens


<400> 1688
gcggcaagct ttttgcaaag cctaggc                                     27


<210> 1689
<211> 271
<212> DNA
<213> Homo sapiens


<400> 1689
ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg 60
aaatatctgc catctcaatt agtcagcaac catagtcccg cccctaactc cgcccatccc 120
gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa tttttttttat 180
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt 240
ttttggaggc ctaggctttt gcaaaaagct t                                271


<210> 1690
<211> 32
<212> DNA
<213> Homo sapiens


<400> 1690
gcgctcgagg gatgacagcg atagaacccc gg                               32
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<210> 1691
<211> 31
<212> DNA
<213> Homo sapiens

<400> 1691
gcgaagcttc gcgactcccc ggatccgcct c                          31


<210> 1692
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<212> DNA
<213> Homo sapiens

<400> 1692
ggggactttc cc                                               12


<210> 1693
<211> 73
<212> DNA
<213> Homo sapiens

<400> 1693
gcggcctcga ggggactttc ccgggggactt tccgggggact ttccgggact ttccatcctg 60
ccatctcaat tag                                              73


<210> 1694
<211> 256
<212> DNA
<213> Homo sapiens

<400> 1694
ctcgagggga ctttcccggg gactttccgg ggactttccg ggactttcca tctgccatct 60
caattagtca gcaaccatag tcccgcccct aactccgccc atcccgcccc taactccgcc 120
cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga 180
ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg 240
cttttgcaaa aagctt                                          256
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INTERNATIONAL SEARCH REPORT

A.	CLASSIFICATION OF SUBJECT MATTER
IPC(7)	: C12P 19/34
US CL	: 435/91.1

According t International Patent Classification (IPC) or t both national classification and IPC

B.	FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
    U.S. : 435/91.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
MEDLINE, SCISEARCH, GenEmbl Database

C.	DOCUMENTS CONSIDERED TO BE RELEVANT	
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim N .
Y	Database GenEmbl on STN. KELKER, W. 'Sequence of human E-cadherin cDNA', GenEmbl Database, Acceesion Z18923.1, Version Z18923.1 GI:31074, 04 December, 1992 (04.12.1992), see nucleotide position 456-1007.	1-12, 14-16, and 21 for SEQ ID NO:1
Y	BANERJI, J. A gene pair from the human major histocompatibility complex encodes large proline-rich proteins with multiple repeated motifs and a single ubiquitin-like domain, Proc. Natl. Acad. Sci. USA, 1990, Vol 87, pages 2374-2378, see entire document.	1-12, 14-16, and 21 for SEQ ID NO:2
Y	Database GenEmbl on STN. SKUCE, C. 'Homo sapiens chromosome 20 clone RP4-661I20 map q11.23-12', GenEmbl Database, Acceesion AL031669, Version AL031669.18 GI:6983365, 11 FEBRUARY, 2000 (04.02.2000), see nucleotide position 63147-63482.	1-12, 14-16, and 21 for SEQ ID NO:3
Y	Database GenEmbl on STN. RAKER, V.A. 'Human SnRNP core protein Sm D2 mRNA, complete cds'., GenEmbl Database, Accession U15008, Version U15008.1 GI:600747, 10 December, 1994 (10.12.1994), see nucelotide position 23-479	1-12, 14-16, and 21 for SEQ ID NO:4
Y	Database GenEmbl on STN. ELLER et al. 'Cellular retinoic acid-binding protein [human, skin, mRNA, 735 nt]', GenEmbl Database, Accession S74445, Version S74445.1, GI:241541, 7 May, 1993 (07.05.1993), see nucleotide position 7-733.	1-12, 14-16 and 21 f r SEQ ID NO:6

☒ Further documents are listed in the continuation of Box C.   ☐ See patent family annex.

Dat of the actual completion of the international search	Date of mailing of the international search report
03 May 2000 (03.05.2000)	2 6 JUL 2000

Name and mailing address of the ISA/US
        Commissioner of Patents and Trademarks
        Box PCT
        Washington, D.C. 20231
Facsimil No. (703)305-3230
	Authorized officer
	
	Michael Woodward
	
	Telephone No. (703) 308-0196

F rm PCT/ISA/210 (second sheet) (July 1998)

INTERNATIONAL SEARCH REPORT

C (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Database GenEmbl on STN. SHARMA et al 'Human class III alcohol dehydrogenase (ADH5) chi subunit mRNA, complete cds.', GenEmbl Database, Accession M30471, Version M30471.1 GI:178133, 5 October, 1995 (05.10.1997), see nucleotide position 2-2277.	1-12, 14-16, and 21 for SEQ ID NO:8
Y	Database GenEmbl on STN. ABEDINIA , M. 'Human transketolase (TKT) mRNA, complete cds.', GenEmbl, Accession U55017 M86521, Version U55017.1 GI:1297296, 6 May, 1996 (06.05.1996), see nucleotide position 687-2038.	1-12, 14-16, and 21 for SEQ ID NO:10

Form PCT/ISA/210 (continuation of second sheet) (July 1998)

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION IS LACKING This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1.

Group 1, claims 1-12, 14-16, and 21 in so far as they are drawn to the first ten polynucleotides of Table 1 (pages 12-118), protein, vector, gene, method of making host cell, recombinant host cell, method of producing the protein of SEQ ID NO:61.

Groups 2-209, claims 1-12, 14-16, in so far as they are drawn to the next 208 polynucleotide groups (any four sequences constitute a single group) and encoded proteins listed in Table 1.

Groups 210-418, claim 13, in so far as they are drawn to isolated antibodies that bind to any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 419-627, claims 15-16, in so far as they are drawn to a method of making any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 628-836, claim 17, in so far as they are drawn to a method of treatment by administration any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 837-1045, claim 18, in so far as they are drawn to a method of diagnosing a pathological condition by determining a presence or absence of a mutation in any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 1046-1255, claim 19, in so far as they are drawn to a method of diagnosing a pathological condition by determining the presence or amount of any one group of the next 208 polypeptide sequence groups listed in Table 1.

Groups 1256-1465, claims 20 and 23, in so far as they are drawn to a method of identifying any one group of the next 208 polypeptide sequence groups listed in Table 1, and the product produce by the same method.

Group 1466-1675, claim 22, in so far as they are drawn to a method of identifying an activity in a biological assay by expressi n of any one group of the next 208 polypeptide sequence groups listed in Table 1.

The inventions not elected, do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT rule 13.2, the non-elected groups lack the same or corresponding technical features for the following reasons: Group 1 corresponds to the first invention wherein the first product is the polynucleotide, and the first method of use is the method of using the polynucleotide to make the protein, and the protein. Note, there is no method of making the polynucleotide. Each of groups 2-1675 does not share the same or corresponding special technical feature because, each group is drawn to different polynucleotide or encoded protein. Additionally, each of groups 210-1675 does not share the same or corresponding technical feature because, each group is drawn to different compounds or methods of using any of the fifty polynucleotides and encoded proteins listed in Table 1. The Authority therefore considers that the several inventions do not share a special technical feature within the meaning of PCT Rule 13.2 and thus do not relate to a single general inventive concept within the meaning of PCT Rule 13.1.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/05882

B ⅄ I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reas ns:

1. ☐ Claim Nos.:
   because they relate to subject matter not required t be searched by this Authority, namely:

2. ☐ Claim Nos.:
   because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claim Nos.:
   because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II   Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
Please See Continuation Sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-12, 14-16, and 21 for the first 10 sequences in Table 1

Remark on Protest   ☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.